

The Mining Journal,

RAILWAY AND COMMERCIAL GAZETTE:

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

No. 1563.—Vol. XXXV.

LONDON, SATURDAY, AUGUST 5, 1865.

(STAMPED.....SIXPENCE.
UNSTAMPED, FIVEPENCE.)

Mining Exchange, London.

MINING EXCHANGE, LONDON.
With a view of correcting the evil resulting from parties advertising mining shares at fixed prices and declining to deliver the same, of which frequent complaints have been brought before the Committee, at a meeting of the members, held on Tuesday, the 18th inst., the following resolution was passed, and is in operation from this date:—
"That no MINERS of the MINING EXCHANGE shall be allowed, directly or indirectly, to advertise shares at fixed prices, under pain of suspension."
Mining Exchange, London, July 18, 1865. W. E. JOHNSON, Sec.

MR. JAMES CROFTS, SHAREBROKER,

No. 1, FINCH LANE, CORNHILL.
(Established 22 years.)
Mr. Crofts has the following choice SHARES FOR SALE, and IMMEDIATE DELIVERY, all calls paid, net, for cash:—50 Bedol-Aur, 12s. 6d.; 5 Clifton, £27½; 10 Clifton (advancing), 30 Biddle Hill, 15s. 6d.; 25 Chiverton Moor, £3¼; 25 Crebhor, Chiverton, £10½; 5 East Caradon, £13¼; 25 East Rosewarne, £23½; 20 East Laxey, £23½; 10 East Caradon, £13¼; 10 Frank Mills, £17¼; 25 Great North Laxey, 30s.; 5 Great Laxey, £20½; 20 Great Vor, £24¼; 5 Great Fortune, £4; 100 Great South Chiverton, 6s. 6d.; 20 Great Wheel Busy, £3¼; 50 Lady Bertha, 10s. 6d.; 10 Mark Valley, £4 10s. 6d.; 50 North Miners (20s. paid), 7s.; 10 North Eastern, £18; 20 North Trekerby, £2¼; 25 North Chiverton, £2¼; 20 Rosewarne Conso, 17s. 6d.; 20 South Darren, 30s.; 15 South Condurrow, £3 11s. 6d.; 15 Tresear, £2; 5 West Chiverton, £7½; 25 Wheel Grenville, £2½; 20 Frontino and Bolivia Gold, £2½.
*IMPORTANT.—Should a fall take place in the value of any of the above shares during next week, Mr. Crofts will deliver them at the reduced price.
See Mr. Crofts' letter, on p. 500, as to the merits and value of several of the above shares.
BUYER of Redmoor, Bedol-Aur, and Central America.

MR. JAMES LANE, No. 44, THREADNEEDLE STREET,

LONDON, E.C.
JAMES LANE has FOR SALE at net prices:—5 Basset and Grylls; 10 Bedford United, 25s.; 25 Biddle Hill, 15s.; 20 Carn Camborne, £13½; 10 Chiverton, £10; 20 Dollar Cove, £1; 10 East Lovell, £10¼; 20 Drake Walls, 15s.; 20 East Russell, £4; 40 East Lane, 11s.; 5 East Caradon, £12½; 10 East Carn Brea, £2½; 25 East Rosewarne, £23½; 10 Frank Mills, £17¼; 50 Great Busy, £3¼; 50 Great North Laxey; 10 Great Vor; Harriett, 7s. 6d.; 20 Hallenbag, £3¼; 50 Leeds and St. Aubyn, £4; 10 North Trekerby, £2½; 20 North Laxey, 30s.; 50 North Miners, 8s.; 10 Rosewarne Conso; 20 South Laxey, £2½; 20 Stridg, 2s. 3d.; 50 Tolvadden, 8s.; 5 West Caradon, £4¼; 10 Tresear, £2; 5 Buller, £20¼.
J. Lane is a BUYER of Drake Walls, Wheel Uny, West Frances, Trellawny, &c.

MR. WILLIAM LELEAN (Member of the Mining Exchange), has

FOR SALE the FOLLOWING SHARES:—
30 Bedol-Aur, 10 Great North Laxey, 15 South Darren, 10 Biddle Hill, 10 Gonnemena, 10 South Lovell, 25 Carn Camborne, 5 Great Vor, 10 South Grenville, 10 Clifton, 5 St. John Tolgus, 5 South Trekerby, 10 Clifton, 5 Great So. Chiverton, 5 South Frances, 5 Clifford Amalgamated, 10 Great Busy, 1 St. John del Rey, 5 Cook's Kitchen, 5 Hingston Down, 10 St. Ives Conso, 15 Chiverton Moor, 5 Hellenbag, 5 Stray Park, 20 Drake Walls, 25 Lady Bertha, 30 Tolvadden, 15 East Wheel Vor, 10 Mark Valley, 5 Tincroft, 5 East Carn Brea, 2 West Caradon, 15 East Grenville, 10 North Croft, 1 Wheel Basset, 15 East Rosewarne, 5 North Trekerby, 50 Wheel Uny, 15 East Russell, 15 North Shepherds, 10 Wheel Grenville, 1 East Basset, 5 North Rosekar, 2 West Chiverton, 5 East Caradon, 10 North Miners, 5 Wheel Union, 5 East Lovell, 20 North Chiverton, 50 Wheel Harriett, 20 East Providence, 20 Pendean, 5 Wheel Trellawny, 15 Frank Mills, 2 Providence, 10 Wheel Chiverton, 10 General Mining Co. of Nova Scotia, 100 Rosewarne Conso, 1 Wheel Seton, 10 Great Fortune, 25 Snafell, 1 West Basset, 5 Great Laxey, 15 South Condurrow, 1 West Seton.

WANTED TO PURCHASE:—Great Laxey (new shares), Reineis Laxey, Snafell, Beller, East Basset, Chiverton, West Chiverton, and Great North Laxey.
MR. LELEAN BUYS and SELLS all descriptions of ENGLISH and FOREIGN STOCKS and SHARES, INSPECTS MINES, and TRANSACTS all the usual BUSINESS of a STOCK and SHAREDEALER, and parties may rely upon him for sound advice and punctuality in all his engagements.
I refer my correspondents to my remarks in page 500 of this day's Journal.
MR. LELEAN RECOMMENDS, the immediate purchase of Great Laxey, Rosewarne Conso, Mandin, Great South Chiverton, West Chiverton, Wheel Chiverton, North Miners, North Basset, and Snafell.
Bankers: Messrs. Roberts, Labbock, and Co.
Office, 11, Royal Exchange, London, E.C.

MR. WILLIAM LELEAN'S STOCK, SHARE, AND

FINANCE REGISTER, should be consulted by all who wish to make safe and profitable investments, giving from 10 to 15 per cent. Single copies, 6d. each; Annual subscription, 5s. Published monthly.—11, Royal Exchange, E.C.

JOSEPH J. REYNOLDS, JUN.,

18, UNION COURT, OLD BROAD STREET, LONDON, E.C.

MR. JAMES WALTON, STOCK, SHARE, AND MINING

BROKER, 9, QUEEN'S SQUARE, BRISTOL.

MR. G. D. SANDY, SHAREDEALER, No. 48

THREADNEEDLE STREET, LONDON, E.C. (Member of the Mining Exchange).
Correct Daily Price List issued gratis on application.

MR. E. GOMPERTS, MINING OFFICES,

3, CROWN CHAMBERS, THREADNEEDLE STREET, LONDON, E.C.
BUSINESS TRANSACTIONS IN BRITISH AND FOREIGN STOCKS and SHARES.
Bankers: London and Westminster Bank.

MR. J. P. ENDEAN, MINE AND GENERAL SHARE

DEALER has REMOVED from 1, Crown-court, Old Broad-street, to more extensive and convenient offices, at 5, FINCHY CHAMBERS, LONDON WALL.

JOHN RISLEY, 32, LOMBARD STREET, LONDON, E.C.

is a BUYER of—
Great Wheel Vor, North Dolcoath, Wheel Buller, Pendean, East Wheel Russell, West Caradon, Stray Park, Copper Hill, Condurrow.

MATTHEW GREENE, STOCK and SHAREDEALER,

9, GRACECHURCH STREET, LONDON, has the FOLLOWING SHARES

for sale:—
100 Great N. Downs, £2 1s. 10 South Condurrow, £2 8s 20 Wh. Grenville, £2 8s 6d
40 North Grenville, 2s. 3d. 10 Prosper United, 2s. 6d. 10 Chiverton, 2s. 3d.
100 Lady Bertha, 10s. 6d. 10 West Caradon, £2 2s 6d. 20 Carn Camborne, 2s. 6d.
7 West Chiverton, £2 4s 6d. 10 Frank Mills, £2 2s 6d. 25 Rosewarne United, 2s. 6d.
40 East Rosewarne, £2 4s 6d. 20 Drake Walls, 15s. 6d. 20 Caradon Hill, 2s. 6d.
40 West Vor, 12s. 6d. 25 East Russell, £2 8s 6d. 200 Vale of Towry, 2s.
40 Chiverton, £2 4s 6d. 5 Clifford, £2 4s 6d. 5 St. Ives Conso, £2.
5 Tresear, £2 4s 6d. 5 Great Vor, £2 4s 6d. 30 St. Day United, 1s. 6d.
5 Carn Brea, 15s. 6d. 50 Unity, 2s. 30 South Darren, 3s. 9d.
20 Kelly Bray, 6d. 5 East Basset, £1 8s 6d. 5 North Robert, 7s.
2 Buller, £27½. 10 E. Carn Brea, £2 3s. 9d. 5 Great Laxey, £20 10s.
20 North Down, 4s. 6d. 15 East Grenville, £2 10s.

M. GREENE'S Daily Mining Share Price List, in time for the evening mails (closing price up to four o'clock), post free on application.
Bankers: Imperial Bank.

MR. GEORGE BUDGE, No. 4, ROYAL EXCHANGE

BUILDINGS, LONDON, E.C. (Established 18 years), has FOR SALE:—
200 Santa Barbara; 200 Okla Tor; 15 Chiverton; 30 Mandin; 50 South Callington; 120 Great South Chiverton; 40 Gawn; 40 East Rosewarne; 150 Don Pedro; 200 Great Tolvadden; 25 Wheel Uny; 50 Unity; Bryntall; 100 Frontino and Bolivia; 100 North Laxey; 70 Lady Bertha; 100 Nova Scotia (Gold); 2 Miners; 20 Great North Laxey; 75 Wheel Harriett; 50 Great Retailack; 25 United Mexican; 20 West Laxey; 60 Kelly Bray; 35 Rosekarneweth; 20 Quebrada (fully paid); 25 Pendean; 5 Mark Valley; 30 Chiverton Moor; 60 East Chiverton; 45 Redmoor; 20 South Laxey; 10 East Caradon; 3 Great Vor; 50 Sittney Metal; 10 Sittney Carn; 150 Vale of Towry; 100 Prince of Wales; 50 East Gumnialake.
BANKERS: Messrs. Glyn, Mills, Currie, and Co.

STOCK EXCHANGE SECURITIES.

Railways. Banks. English Funds. Discount. Foreign Funds. Loans. Dock. Gas. Water Works. Insurance. Land. Hotel. Marine Insurance. Cornish Mines. Devon's Mines. And other public companies.

MR. PETER WATSON, STOCK AND SHAREDEALER,

begs to state that every information respecting any of the above companies may be had on personal application, or by letter, as to PURCHASES and SALES, with advice as to the most desirable investments.
From the close proximity of his offices to the Stock Exchange, and also the Mining Exchange, he is enabled to act with promptitude on all orders entrusted to him in the PURCHASE or SALE of every description of stocks or shares, at net prices for cash or fortnightly settlements.
TELEGRAPHIC MESSAGES of customers to BUY or SELL in any of the above companies punctually attended to, at net prices for cash or half-monthly settlements, at the closest possible market prices of the day.
Twenty years' experience.
(Two in Cornwall and Eighteen in London.)
Bankers: The Union Bank of London, and the Alliance Bank.

The present is an unusually favourable period for the investment of capital.
A SELECTED LIST of Railway, Bank, Financial, Foreign Funds, Steamships, Foreign and Cornish and Devon Mines, &c., sent on application, with special recommendations as to investments, &c., on the distinct understanding that any business resulting through his information or advice may be done through him.
PETER WATSON, Stock and Sharedealer, 79, Old Broad-street, London, E.C.

EDWARD COOKE, SHAREDEALER, AND MINING

EXCHANGE, LONDON, E.C.
Edward Cooke deals at close prices in railway, bank, and other securities usually dealt in on the Stock Exchange, and satisfactory references given in any town in the United Kingdom if required.
Bankers: Alliance Bank, Lombury.

WILLIAM SEWARD,

19, THROGMORTON STREET, LONDON, E.C.

NOTICE OF REMOVAL.

MESSRS. WARD AND JACKMAN, STOCK AND SHAREDEALERS, have REMOVED from 2, Adam's-court to No. 1, CUSHION COURT, OLD BROAD STREET, CITY, E.C.

Members of the Mining Exchange.—Bankers: London and Westminster, Lombury.

GEORGE RICE, SHAREDEALER, 5, COWPER'S COURT,

BIRCHIN LANE, LONDON, Member of the Mining Exchange (23 years' experience), DEALS at close prices in MINING SHARES, as BUYER or SELLER.
GEORGE RICE will return from the mining districts of Devon and Cornwall next week, when he will be in a position to give sound and valuable information upon several of the principal mines in the counties.
Money advanced on mining shares.
Bankers: Bank of London.

MESSRS. BATSON AND SMITH, at the request

of numerous clients who have SHARES FOR SALE, advertise them at fixed prices, FREE OF COMMISSION:—
15 Biddle Hill, 16s. 3d. 10 Great Fortune, £2 10s. 30 North Miners, 6s. 6d.
20 Carn Brea, 5s. 8d. 50 Great Retailack, 5s. 20 New Clifton, 25s. 6d.
3 Cargill, £30. 5 Great Vor, £24¼. 15 Rosewarne United, 2s. 6d.
30 Drake Walls, 15s. 6d. 10 Great Laxey, £20 12 6d. 15 South Darren, 32s. 9d.
10 E. Wheel Vor, 17s. 6d. 15 Great No. Laxey, 34s. 30 South Grenville, 2s. 3d.
20 Gt. So. Chiverton, 10s. 20 Gt. No. Downs, £2 2s 6d. 40 Vale of Towry, 2s. 2d.
5 E. Carn Brea, £2 3s. 9d. 30 East Laxey, 32s. 20 West Caradon, £2 4s 6d.
10 East Grenville, £3. 30 Kelly Bray, 5s. 9d. 50 Wheel Uny, 2s.
20 E. Rosewarne, £2 4s 6d. 10 Mark Valley, £4 10s. 6d. 20 Wheel Union, 6s. 6d.
3 E. Basset, £17 17s. 6d. 20 North Trekerby, £2 3s. 20 Wheel Harriett, £2 4s.
5 East Lovell, £2 15s. 9d. 40 North Robert, 6s. 30 Wheel Harriett, £2 4s.
20 E. Gumnialake, £1 0s. 6d. 15 North Croft, 32s. 60 Wt. Gt. Vor, 25s. 6d.
10 Frank Mills, £17 17s. 6d. 15 North Croft, 32s.

Before investing capital apply to Messrs. BATSON and SMITH, who, by keeping a great number of mines constantly under notice, are in a position to recommend those in which shares should be purchased.
Shareholders, by forwarding a list of the mines they are interested in, will receive immediate information of any alteration in price, and, if required, our opinion of them.
Shares bought or sold at the best market prices.
Office, 29, Bishopsgate-street Within, London, E.C.

MR. WILLIAM MARLBOROUGH, 1, GREAT ST. HELEN'S,

BISHOPSGATE STREET, LONDON, E.C. (Established 11 years), has FOR SALE the FOLLOWING SHARES, at net prices:—
100 Pollard, 6d. 10 East Rosewarne, £3¼. 40 Tolvadden, 3s. 9d.
35 Unity, 1s. 9d. 10 North Trekerby, £2 3s 9d. 5 Cwm Erdd, 35s.
50 Rosewarne Con., 17s. 6d. 15 Wheel Grenville, £2¼. 50 East Laxey, 32s. 6d.
50 Bedol-Aur, 12s. 6d. 50 Gt. No. Laxey, 34s. 6d. 40 Vale of Towry, 1s. 9d.
100 Gt. S. Chiverton, 6s. 9d. 50 North Miners, 6s. 14 Frank Mills, £17¼.
30 So. Caradon Hooper, 6d. 40 Biddle Hill, 15s. 6d. 5 No. Shepherds, £2¼.
15 East Caradon, £13. 40 Lady Bertha, 10s. 6d. 20 Wheel Union, 6s. 6d.
25 Harriett, 7s. 6d. 40 Kelly Bray, 5s. 9d. 10 Great Busy, £3.
10 Pendean, 30s. 9d. 20 Rosewarne United, 2s. 6d. 2 Wheel Rose, 2s.
25 Gumnialake. 3 North Rosekar. 2 Trellawny.

MR. T. ROSEWARNE, 81, OLD BROAD STREET,

LONDON, E.C., has FOR SALE:—
Bedford United. East Carn Brea. Marke Valley. North Robert. Chiverton. Frank Mills. Gawn United. North Trekerby. Clifford Amalgamated. Great Wheel Vor. Okla Tor. South Condurrow. East Lovell. Great Laxey. Hingston. West Chiverton. East Gumnialake. Kelly Bray. West Caradon. East Caradon. Hingston. East Russell. Kelly Bray. Frontino and Bolivia. Tresear. Lady Bertha. Wheel Rose. Rosewarne United. Bedford Conso. Frank Mills.

Is a BUYER of the following, at the highest market prices:—
East Rosewarne. Drake Walls. Frontino and Bolivia. Tresear. Lady Bertha. Wheel Rose. Rosewarne United. Bedford Conso. Frank Mills.

T. ROSEWARNE is a SELLER of Chiverton, East Caradon, and West Great Vor, for delivery time on, below present market prices.
Aug. 4, 1865. Bankers: Bank of London.

MR. THOS. THOMPSON, MINING OFFICES,

12, OLD JEWRY CHAMBERS, LONDON, E.C.
Mr. Thompson being intimately acquainted with the LAXEY DISTRICT, in the Isle of Man, and its various mines, and continually receiving private and valuable information respecting them, will be happy to communicate with anyone thinking of making an investment in the mines of this district.

MR. GEORGE BATTERS strongly recommends his friends to buy

West Chiverton, Chiverton, Herdsfoot, South Caradon, Devon Great Conso, Great Wheel Vor, Westworth Conso, and Sittney Wheel Metal for investment. These shares will pay good interest for money at present quotations.
Advertisements have recently been inserted in the columns of the MINING JOURNAL by dealers who, having sold shares for forward delivery, endeavour to frighten timid holders in order to possess themselves of their shares to fulfil their contracts; this system has been adopted particularly against Great Wheel Vor, West Chiverton, and Chiverton shares, and I caution my friends against parting with their property, or giving credence to the unfounded assertions of interested parties.—76, Old Broad-street, London, E.C.

JAMES HUME, 74, OLD BROAD STREET, LONDON, E.C.

(Member of the Mining Exchange).
SOUTH CONDURROW.—Advice (intended for holders) to sell these shares has been gratuitously tendered; and so long as the improving prospects of the mine supply incentives for the designing to become possessed of the rising property of others, and especially of that of the unsuspecting, the adviser will, no doubt, continue his kind offices.
No extra supply of shares, however, has been offered, and, probably, the fact that a lot of worthless trash, unsaleable even at a few pence per share, are, at the same time, puffed up and strongly recommended, has aroused suspicion, and supplied a key to the motives of the worthy and officious promoter.
Mr. Hume takes this opportunity to caution his friends and clients against such counsel, the value of which he leaves to their own judgment. Those who wish to sell will find a good market, and plenty of buyers; and those who are not to be frightened by misrepresentation, will be well repaid by holding on.
Mr. Hume is a buyer of any number at quoted prices—3½, 3¼, 3%, &c.
Money advanced on good mining shares.
Bankers: London Joint-Stock Bank.

MR. T. P. THOMAS, MINING AGENT AND

AUCTIONEER, 2, CROWN COURT, THREADNEEDLE STREET, LONDON, E.C.

MR. T. E. W. THOMAS, MINING AGENT AND GENERAL

MINING SHAREDEALER, 6, NEW BROAD STREET, LONDON, E.C.

GODOLPHIN HILL MINING COMPANY.—Prospectuses can be obtained on application to Mr. THOMAS.

THE MINING EXCHANGE.—At a meeting of its members, held

on Tuesday, July 18, a resolution was passed empowering the Committee to suspend or dismiss any member advertising shares at fixed prices.

MR. FRANCIS G. LANE, No. 2, ROYAL EXCHANGE,

and one of the first subscribers to the Mining Exchange, having every confidence that the public in general, and his clients in particular, appreciate the system of advertising prices to the shares they have for sale, on principle, objected to the resolution; but having regard to the laws of the Institution, for the present, or until the said resolution is rescinded, or otherwise, intends abstaining from directly violating the resolution; should, however, the same be confirmed, I appeal to my clients for a continuance of that support which they have hitherto favoured me with, and for which I have no reason, and I believe they also, to regret, and if continued I shall tender my resignation as a member of the Exchange, and advertise shares as before at fixed prices, trusting that my connection of over 15 years with the management of mines and the market, my large dealings and extensive connection, also the regularity in which all engagements have been carried out, both with the public and members of the Exchange, will be the means of securing my share of public support; I ask no more. My office being in the most central part of the City, is used as a register for all stocks and shares that for the moment may not be immediately marketable. Sellers of such stock by that means frequently meet with a ready sale, and buyers effect a great saving in commission and amount paid for stock.
The following shares, being a portion of the lot advertised in the Journal of the 15th July, are still for sale at prices therein quoted, free of commission:—
10 Bryn Gwlog. 20 Grylls Florence. 100 Prince of Wales.
20 Bedford United. 55 New Martha. 50 Snafell (£1 fully paid).
5 Cargill. 20 North Miners, bearing 40 St. Day United.
40 Carn Camborne. 20 per cent. preferential dividend (18s. 25 St. Just United.
50 Cape Corn. (30s. paid). 50 West Wheel Vor.
80 Dale. 20 East Vor. 20 North Phoenix. 50 Wheel Crebhor.
100 East Vor. 20 North Frances. 50 Wheel Union.
10 Great Wheel Busy.

Mr. F. G. LANE has also business in the following shares, and would be a seller at a trifling above the dealers' buying prices:—

Closing prices.	Closing prices.
East Caradon .. £12 5 0 .. £12 15 0	Great No. Laxey .. £1 12 6 .. £1 17 6
East Grenville .. 2 16 3 .. 3 0 0	New Wh. Lovell .. 0 10 0 .. 1 0 0
East Rosewarne .. 3 2 6 .. 3 7 6	North Miners .. 0 6 6 .. 0 7 6
East Providence .. 0 10 0 .. 0 15 0	Lady Bertha .. 0 8 0 .. 0 10 0
Frank Mills .. 7 0 0 .. 7 5 0	South Condurrow .. 3 7 6 .. 3 12 6
Great Wh. Vor .. 33 17 6 .. 34 5 6	North Trekerby .. 2 3 9 .. 2 6 3
East Russell .. 3 5 0 .. 3 10 0	West Chiverton .. 75 0 0 .. 77 10 0
Frontino & Bolivia .. 2 10 0 .. 2 12 6	Tresear United .. 1 12 6 .. 1 15 0
Chiverton .. 9 12 6 .. 10 0 0	Tresear .. 4 5 0 .. 4 15 0

Advances made on mining shares.
Parties wishing to dispose of their interest in mines will do well to communicate with the advertiser, who is at all times in a position to purchase for cash.
Parties of respectability can have transfers registered into their names previous to payment.
Bankers: London and County Bank.

WILLIAM WARD,

29, THREADNEEDLE STREET, LONDON, E.C.

WILLIAM BARTLETT, No. 2, BUCKLERSBURY,

LONDON, E.C.
Bankers: Alliance Bank.

GREAT WHEEL VOR.—Those who acted on my advice, and

bought at £31, can now get £38¼, which, with the dividend, is equal to £34¼. For further advice, apply to Mr. J. B. REYNOLDS, 3, Crown-court, Old Broad-street, London, E.C.

SOUTH CALLINGTON.—I strongly advise the purchase of these

shares for a rise to £4 per share in twelve months hence. Present price, £1½ to £1¾.—J. B. REYNOLDS, 3, Crown-court, Old Broad-street, London, E.C.

MR. J. B. REYNOLDS, 3, CROWN COURT, OLD BROAD

STREET, LONDON, E.C.
Business promptly done and settled.
Correspondence with the first agents of the day.
Mines inspected on reasonable terms.

MR. JOHN BATTERS, STOCK AND MINING

SHAREBROKER, 13, THROGMORTON STREET, LONDON, E.C., recommends for immediate purchase Chiverton shares. This mine will soon be drained to the bottom level, when a great and important advance in the price of shares must take place. Full particulars given on application.
BUYER of Central Miners, North Dolcoath, and Chiverton.

MR. WALTER TREGELLAS, 3, CROWN COURT,

THREADNEEDLE STREET, LONDON, E.C., continues to deal at close market prices in all good sound dividend and progressive mines.
Mr. TREGELLAS has FOR SALE, for immediate cash:—10 Princess of Wales Slate Company (£5 paid); 20 Prince of Wales (£4 paid); 5 The London, Limited (£7 paid); 20 Inns of Court Hotel (£7 paid).

SLATE AND SLAB QUARRY FOR SALE.—A SUPERIOR

SLATE AND SLAB QUARRY, situated in the vicinity of FESTINIOG, is OFFERED FOR SALE.—For particulars, apply to "X," Bethesda, Festinog, North Wales.

TO SLATERS AND SLATE STONE WORKERS.—

WANTED, TO PROCEED TO OPORTO AND LISBON, in the KINGDOM of PORTUGAL, TWO active YOUTHS from 18 to 20 years of age, who can lay what is commonly known as rag slates, as well as slate slates. Also two youths who can work slate stone, make chimney pieces, clisters, &c. They are required more as instructors than to work themselves. All reasonable expenses paid to London and Liverpool and the costs of the passage out. Wages £6 per month, or piece work if desired.—Apply to J. TEED LUSCOMBE, Esq., solicitor, 2, South-square, Grays Inn, London.

BRITISH AND FOREIGN INVESTMENT.—

Mr. THOMAS SPARGO, 224, and 225, GRESHAM HOUSE, OLD BROAD STREET, LONDON, E.C. TRANSACTS EVERY DESCRIPTION OF BUSINESS in the PURCHASE and SALE of SHARES in BANKS, CANALS, MINES, RAILWAYS, BRIDGES, INSURANCES, and ALL OTHER DESCRIPTIONS OF BRITISH and FOREIGN STOCK.
Mr. SPARGO has 20 years' experience of mining, ten of which he was engaged in practical mining, and ten years he has transacted business in mining shares and stock, at 224 and 225, Gresham House, Old Broad-street, City, E.C.
Bankers: Bank of London.

CHIVERTON DISTRICT.—A SECTIONAL PLAN OF

CHIVERTON MINE can be had on application, by post or personally, to Mr. EDWARD BREWIS, 3, Crown-court, Old Broad-street, London, and Newcastle-on-Tyne. N.B.—1200 copies already distributed, and only a few remaining.

MESSRS. BREWIS and LYNCH, 3, CROWN COURT, OLD

BROAD STREET, LONDON, E.C. (Mr. Edward Brewis of the Mining Exchange), have FOR SALE the whole, or any part of—
250 Welsh Gold. 10 New Clifton. 25 West Jane.
250 West Clogau. 10 North Croft. 25 West Great Work.
130 North Frances. 5 Wheel Emma. 15 Long Lake.
20 South Exmouth. 25 North Miners (limited). 25 Cashwell (limited).
15 Chiverton. 20 Harwood (limited).

WANTED, 50 shares, or any part, in East Biddle Hill Mine; apply, with lowest price, "cash," as above. BANKERS: National Bank.

ROBERT LIBBY AND SON,

MINE AND SHAREDEALERS, &c., CAMBORNE, CORNWALL.

The undermentioned mines we would at once advise capitalists to speculate in, as we can say with confidence that each bears such indications that will lead to early and important discoveries:—
Wheel Trannack. Rosewarne United. Grylls Wheel Florence.
East Lovell. East Rosewarne. New Lovell.

N.B.—Parties wishing to have mines inspected can obtain the services of practical agents by applying to R. LIBBY and SON.

RICHARDS BROTHERS,

MINE AGENCY OFFICES, ABBEY MEAD, TAVISTOCK.

Original Correspondence.

THE LAW OF JOINT-STOCK COMPANIES.

SIR.—Your reply, in last week's Journal, to "Scotsman," that a limited company cannot bind its shareholders if it commences business before a substantial part of its nominal capital is subscribed, is incorrect; and, unless explained, might be productive of much harm and considerable loss to some of your readers. As regards cost-book companies, it is, undoubtedly, the law, because a shareholder, by becoming such, contracts to bear a certain proportion of the expenses of carrying on and developing the mine. If such companies were allowed to compel the subscribers to accept the shares subscribed for, when only a nominal portion of the shares were taken up, they would be compelling them to undertake a heavier amount of liability than they contracted for; in other words, they would be compelling them to take shares in a company different from that in which they agreed to take them. It makes all the difference whether a shareholder has to subscribe one-fourth of the costs of the mine, or one-fortieth. On the contrary, in a company limited by shares the contract of the subscriber is to invest so much capital in a company by taking a certain number of shares of a fixed amount. His contract being simply to subscribe a certain amount of capital in a certain company, that contract has nothing whatever to do with the company having sufficient capital subscribed to carry out its objects. The Act does not require any proportion of the nominal capital to be taken up, further than that there should be seven members, each holding one share. It was at first thought that a company must have a substantial amount of its capital subscribed before it could commence operations—vide the dictum of Mr. Baron Martin, in the Howbeach Coal Company (Limited) v. Teague, 5 H. & N., 151; but that has since been overruled by the full Court of Exchequer, Baron Martin concurring, in the Ornamental Pyrographic Woodwork Company v. Brown, 8 L. T., N. S., 506, 32 L. J., 190, Ex., in which case it was held that the subscription of a small part only of the nominal capital by the public was no answer to an action for calls. Of course the case is different where there is a special contract in the prospectus that the allotment will not be made until a certain number of shares are subscribed for.

With regard to the other question, respecting special resolutions, I must disagree with your construction. The question is, no doubt, a nice one, but I am inclined to think the section would be construed literally, that a majority of three-fourths of the shareholders present, whether voting or not, must pass the resolution. The resolution is only required for the carrying of important measures, such as altering the regulations, winding-up the company, &c. By requiring a majority of three-fourths, the Legislature has particularly shown a desire to restrict the passing of such resolutions. This being the intention of the Legislature, the courts of law would seek to carry it out, and would rather lean to a curtailment of the powers of carrying the resolution than of an enlargement of them. I think the word "passed" would be construed as meaning consented, and as those declining to vote would not give their consent, the requisite majority would not be obtained. Certainly the words in the latter part of the section, that "a declaration of the Chairman that the resolution has been carried shall be deemed conclusive evidence of the fact without proof of the number or proportion of votes recorded in favour of or against the same," would imply that votes only should be counted; but I cannot think it clear enough to override the previous part of the section. Some Articles of Association provide that a member declining to vote shall be considered as absent from the meeting.

As your correspondent raised a question as to a majority in number and value (which clearly has nothing to do with it), I would take the opportunity of calling attention to a fact not generally known. It is that the qualifications for voting, the number of votes each shareholder is entitled to, &c., can only be entered into at a poll. On a show of hands, all that has to be done is for the Chairman to take the number of those present in the room in favour of the resolution, and those against it, and declare the result. Any member dissatisfied with that result can, subject to the regulations of the company, demand a poll. An illustration of this has been given in the recent elections for members of Parliament, where, on the show of hands, electors and non-electors vote alike, and there is no discrimination made between the two; but when a poll is demanded, then only those strictly entitled to vote are allowed to do so.

A. P.
31, Threadneedle-street, Aug. 1.

THE COPPER STANDARD.

SIR.—Some months ago I addressed a letter to you on the then very low standard of copper ore, and suggesting a remedy; but no notice was taken of it, and matters since then have been going worse instead of better. The smelters are playing the game, so far as the Cornwall and Devon copper mines are concerned, of killing the bird which for them is laying golden eggs. About the close of the Russian war the standard was above 160%; when a produce of 6 per cent. copper made 7½ ls. per ton of ore. This is something about 3½ per ton more than can be made of copper ore now. We all know the smelters are compelled to use the low-produce English ores to mix with the rich foreign ores and regulus, and unless they will give the English miner a better price for his ore, either by a higher standard, or reducing the returning charges, my advice again is, stop the supplies for a short time, let every copper mining company agree together and stop selling their ores for a time, and instead of being as now at the mercy of the smelter, let the smelter be at your mercy. The time is coming when copper will become a very scarce article, as the English mines are fast becoming exhausted, and no discoveries making of any consequence to keep pace with the exhaustion; and the smelters, by the ruinous price they are now giving for copper ore, will cause the majority of the copper mines to suspend working, and prevent new ones from being worked.—Cornwall, Aug. 3. A MINE ADVENTURER.

ALLOYS OF MANGANESE AND IRON.

SIR.—Mr. Simon does not appear to be able to discriminate between metallic manganese and an alloy of iron and manganese, containing an excess of the latter metal. Perhaps if he will reflect that there is as much difference between manganese metal and an alloy of iron and manganese, with excess of the latter metal, as there is between copper and brass, alloyed with an excess of zinc, he will be enabled to perceive that the statements he has quoted are not in the least contradictory. The fact of an alloy of iron and manganese having effloresced, and fallen into the state of a white powder, remains unquestioned.

ROBERT MUSKET.
Cheltenham, Aug. 1.

THE METALLIFEROUS MINES BILL.

SIR.—Referring to some of the Special Rules as laid down in Bill No. 1, which do not appear to be altered in Bill No. 2, I think a little alteration should be made in the clause relating to the approval and publication of the special rules for the guidance of the mine, for it is there laid down "that the same things shall be done by the owner of every mine which shall be begun to be worked, or resumed to be worked, after the date of the commencement of this Act, within — days," &c. I would suggest this clause should be altered in the following or such other manner as would be generally approved of:—And the same things shall be done by the owners of every mine which shall be resumed to be worked after the date of the commencement of this Act, within — days (months) after the first commencement of resumption of working such mine; but that, nevertheless, new mines begun after the passing of this Act shall be exempt for the space of two years from the commencement of working such new mine; for if that clause is left in its entirety the rules, being so strict, may operate against the opening of new mines to the serious detriment of the mining interest. The rules should also be printed in the Welsh and English languages for all mines worked in North and South Wales.

Then, with regard to the clause giving power to the Board to alter and amend any of the special or general rules, it specifies that, "if not objected to by the owner within — days after their transmission to him by the Board, shall be deemed to be established, and be in force at and for the particular mine to which they specially relate." One month, at least, should be substituted for days, to give time to the directors and captains of the mines to consider the effect those alterations and additions in the rules may have on the general bearing of the mine, as it is not always convenient for the directors to meet at a short notice, and the subject may require a great deal of correspondence before they can concede to the alteration. The increased time may have the beneficial effect of saving an arbitration, the expenses of which are sure to be heavy, and one-half will have to be paid by the mine.

I look upon the 11th clause as highly beneficial to the kingdom at large, as the carrying out of that clause in its entirety will be the saving of an

untold amount of money that is now thrown away in numerous old mines by driving useless levels right into the old men's workings; whereas, if proper maps of the underground workings were prepared and deposited, as now proposed, in a National Mining Museum, where they can be examined and copied by the new companies, such mistakes would not occur, and the money thus saved would be applied to opening new ground, with better success, and greater probabilities of returns. The surface plan would also be much improved if the run of the lodes were marked on it—say, in blue, and the course of the levels in red. This would show the extent of the underground workings plainly, and the new companies would not be deceived, as at present. In other respects these clauses are well drawn out, and such as ought to satisfy the mining interest of Great Britain.

CYMRU.

RAISING WATER FROM MINES.

SIR.—In last week's Journal I read a communication signed, "J. J. J." I beg respectfully to answer it, by recapitulating the particulars respecting my patent chain-pump, which, improved like it is now, has nothing to do with the chain-pumps of 300 years ago. As "J. J. J." correctly says, in his valuable article concerning my chain-pump, few persons understand the action played by each disc in the contracted parts of the tube. I will try my best to make them understand it better, by giving some indispensable explanations. For a chain-pump of 100 yards deep there is at the bottom a tube supplied with a mouth-piece to facilitate the ascension of the chain in the column of tubes. This tube is 10 ft. in length, and its first part, on beginning from the end of the mouth-piece, has only 4½ in. of interior diameter, by a length of 3 yards, which length is named the contracted parts of the tube, so that three discs may suck at the same time in the contracted parts. At the end of the length of three yards the same tube assumes the interior diameter of 5 in. (in the length of 10 feet is not included the length of the mouth-piece); at each length of 50 yards there is a tube without a mouth-piece, having 4½ inches interior diameter, by a length of 3 yards 1 ft., inserted in the column of tubes; so that for a depth of 100 yards there are continually six discs sucking at the same time, and keeping the tubes full of water when the chain-pump is stopped. When the discs have passed the contracted parts of tubes they suck no more, but they lick only their interior partitions. When the first disc has ascended the contracted parts of the tube, and sucked the first charge of water, this water could not fall again in the shaft, because it is pushed on in the column of tubes by a new charge of water. The chain-pump being stopped, it requires more than a week before the water contained in the column of tubes may come down the shaft.

A chain-pump of 100 yards deep contains 100 columns of water in its tube, instead of one, like the ordinary pumps. Each disc sustains separately its own column, and prevents my system of pumps fighting with the atmospheric pressure, and by the continual ascension of the chain in the column of tubes, without retrograde action it can be very easily understood that all time of its work is productive; then, it is not astonishing that my chain-pump, worked by a 25-horse power engine, may be able to raise up from a determined depth a quantity of water equal to that drawn up by an ordinary pump worked by a 50-horse power steam-engine from the same depth.

From the suggestion of the honourable gentleman who has written the article mentioned in the *Mining Journal* of July 29, it would be very easy to insert in the column of tubes, at each length of 50 feet, a tube at contracted parts, if it were judged opportune; but, so much as I can judge from my experience, I believe that a tube of 3 yards of contracted parts put up at the bottom of the chain-pump, and another of the same length inserted in the column of tubes, at the height of 50 yards from the bottom, would be strong enough to sustain the 100 columns of water, supported by 100 discs; this means would save a great deal of friction. The tubes are of iron, or cast-iron, glass-enamelled inside and outside. They could be used during 100 years. The India rubber washers are perfect in beauty and quality; they can be employed during four or five years without being replaced. The chain is an ordinary chain, having all its links of the same diameter and of the same thickness, and each link being furnished with a tie-piece adjusted in its centre, to prevent its lengthening, although the chain having been tried before delivery to sustain a weight six times heavier than that which is to be raised up. The pulley which is to be used to work the chain has been lately improved—such as it is now; the same may be used during 10 years without being changed. It possesses on the two sides of its circumference two round plates of cast-iron, supplied each one inside with some teeth, so that when these round plates are fixed together on the exterior sides of the pulley's circumference, by means of iron pins and nuts, they form a way for the chain, and each link and each disc finds in it room to be set on; without that the chain may slip out from the mouth of the pulley, whatever may be the speed at which it runs. When the teeth are wasted it is necessary to replace the round plates by new ones. It is done very easily, without taking off the chain-pulley from the turning shaft; one hour is sufficient to do that. All repairs which could befall during one year to one of my chain-pumps I will undertake to make at my own expense.

This chain-pump is able to raise from all depths the largest quantities, by increasing the strength of its material and the motive-power. It utilises 90 per cent. of effective power.

If those honourable gentlemen who seemed to take some interest in my chain-pump wish to be supplied with some other explanations I should be very glad to satisfy their request.

J. U. BASTIER, C.E.

142, Gower-street North, London, Aug. 1.

GEOLOGY OF NORTHERN PORTUGAL.

SIR.—I notice in the Journal of July 15 a letter signed John Calvert, C.E., alluding to a report of the Serradella Mines, belonging to the Oporto Mining Company (Limited), made by myself, and published in your previous issue. Your correspondent deals with his subject in a very ad captivandum sort of style—his knowledge of the question being extremely limited, and, indeed, his letter being a total perversion of the facts of the case. I may state that Mr. Calvert was engaged by the company to work these mines, but not gaining the confidence of the directors, his resignation was accepted—hence, perhaps, his letters. The main lode, which, according to his statement, has no irregular dip, he was so unfortunate as not to see at all; if the contrary, he did not possess sufficient knowledge of mining to open and develop his works, which the merest tyro would scarcely have failed in doing. Small sulphuretic crystals abound on this lode, suggesting the idea of a gradual sublimation of these volatile matters from below by residual heat, and their subsequent condensation. This phenomenon is generally held to be a strong indication of the igneous origin of metalliferous veins. As I before stated, the lode contains this speciality, and the whole country, in other respects, indicates its volcanic origin. Earthquakes are of frequent occurrence, one having occurred in this district only three months since. I have travelled in various parts of Portugal, and have had the opportunity of observing the geological features of the country, and have also visited very many mines—the deductions I have formed, and which are before stated, being the result of these observations. Granite exists in the immediate neighbourhood of these mines, some partially developed, and upheaved from its proper place. The lode in question is composed of prophyroid granite, hornblende, and quartz, the mineral appearing in the latter. Knowing, as I do, the extremely limited nature of Mr. Calvert's travels in Portugal, and also the shortness of his stay here, I can well understand his want of accurate information, especially after his lamentable show at the mines.

C. B. KING, C.E.

GEOLOGY OF NORTHERN PORTUGAL—No. IV.

SIR.—Following the line of Monte de Cazaes across the River Este to the village of Arcos, an unmistakable system of veins may be traced, which, at Arcos, crop out with strong backs, chiefly composed of hydrous peroxide of iron, conglomerate of iron, and quartz, and compact quartz in a small parallel vein of hydrous peroxide of iron. At Arcos I discovered delicate threads and small semi-crystallised specks of native gold, beautifully disseminated in the iron, and almost exactly similar to that found at Beresowk, in the Ural; and also to discoveries made by myself near Bathurst, New South Wales; near Potosi, in Bolivia; and in the Eastern Cordillera of Central Africa, where I found many veins of that character, and very rich.

These veins at Arcos are in the band of schist already alluded to, and close to the junction of the granite, and ought to be proved down to about 70 or 80 fms., as I have no doubt as to the result they would give to the adventurers; the River Este might, with ordinary care, be made to keep the shaft. I picked up several loose pieces of quartz, which showed small specks of gold, close to the back of the vein.

Little more than a mile from this place, in a most picturesque and lovely spot, looking down upon the sea-coast town of Ville de Conde, with its

many-arched aqueduct, stands the old road-side inn of Casal de Pedro, celebrated for its long having been the famous site of a very rich and valuable quicksilver mine (and has been called the Fountain of Quicksilver). I made a careful survey of this spot, and taking everything into consideration, I came to the conclusion that the globules of quicksilver in the decomposed granite near the surface were the result of antiseptical agency, and not a natural product. I therefore pronounced it so, and condemned it as a lucrative speculation for quicksilver. I have ventured to account for the liquid mercury being found in and around the Casal de Pedro, from the probable fact that this might have been the ancient site of reduction and amalgamation works; and that surface was greatly strengthened when, on carefully analysing the quicksilver collected, I discovered the presence of other metals in small quantities in the state of amalgam with the quicksilver; and, taking into consideration that the outlying belts of schists are both auriferous and argentiferous, the fragments of rich gold quartz found lying about, and the almost invariable custom of the ancient gold miner to carry his ore to the solid granite, there to crush and grind it on some naturally convenient granite plateau, I have no doubt that these minute globules of mercury have lain where they are now found for a very considerable time, and are the waste of early miners, long since forgotten.

JOHN CALVERT, C.E.

MINING IN THE DUCHY OF GOTHIA.

SIR.—English capital is flowing to almost every portion of the globe, and often into remote countries, where participants of an enterprise rarely have an opportunity of judging for themselves of the value of their property; but it often happens that very good speculations in civilised and more frequented countries are neglected, either for want of enterprise among the local inhabitants, or for want of their being generally known. Such a case I intend to bring to the notice of your readers. It is well known that the stratum called "Zechstein" in German, which has given rise to those rich silver and copper mines of Mansfeld, in its continuation touches the base of the mountains of Thuringia almost in their entire length from Suhl to Eisenach. In the duchy of Gotha this stratum has been explored during a number of years by a series of shafts, and it has been proved to be metalliferous for a length of about two English miles (further it has not yet been explored), averaging in thickness from 18 in. to 3 and 4 ft., and even sometimes 7 and 9 ft. A great number of samples have been taken from the different shafts and adits, and analyses have been made, which have given an average produce of 2·3 per cent. for copper, 2·5 per cent. for lead, 20 per cent. for manganese, and the cobalt and nickel bearing ores of about 11 per cent. for copper, 3 per cent. for cobalt, and 3 per cent. for nickel. Silver, also, is present, but no places have been found as yet where the ore contains much more than will pay for its separation, although in former days, at a place called Ilmenau, not 15 English miles hence, extensive silver mines on the same stratum have been in existence, and it is highly probable that if the stratum is more explored, places will be found where the value of silver is higher. The stratum, where it has been explored, crops out on the middle of some large mountains, from 200 to 300 feet above the valley, and, therefore, through an adit of from 90 to 100 fms. in length, can be reached very easily, giving a field of ore above the adit of some 50,000 square fathoms. It contains from 20 to 25 per cent. of moisture, being just like clay, with the same amount of water, and, therefore, can be worked out very easily. The metals only occur as oxides in the stratum, no sulphurets or sulphides being present; and they are distributed in this way through the whole stratum, so that the lower beds of it generally contain a greater portion of the metals than the upper ones. There are no difficulties whatever about water or foul air, and the roof of the seam being a hard dolomite, very little timbering is needed. The nature of the stratum, as well as the situation of the mines, permit the ore to be raised at extraordinary little expense, and, in fact, trials have shown that one man, in twelve hours, can work out about 204 cubic feet of stuff, equal to 102 cwt. of dry ore, and, including timbering and all other expenses, 1 ton of dry ore (equal to 24 cwt. of ore in the mine) can be brought to surface for a little less than 3s. No engine of any kind is required as yet, the shafts being only from 15 to 18 fms. deep, and if a deep level is made, as mentioned above, almost any quantity of ore may be raised in a given time.

Supposing, now, the dry way is chosen for extracting the metals, and only copper is taken into account, it has been proposed to build a blast-furnace of the same dimensions as those at Mansfeld, being able to smelt about 15 tons of dry ore per day, and, therefore, in 280 working days per year, 4200 tons; and supposing the average yield of the ore to be 1½ per cent. for copper (4200 tons of ore containing 63 tons of copper), the expenses for converting this into a regulus of from 25 to 30 per cent. of copper would be about the following:—Expenses for raising 4200 tons of ore, at 3s. per ton, 6300; evaporating the moisture in a small furnace, including fuel and labour, at 1s. 6d. per ton, 3150; 5 per cent. on 210 tons of pyrites, at 17. per ton, 2100; 20 per cent. of fuel (coke)—840 tons, at 10 per cent. of waste and loss of the same during transport, in all 924 tons, at 17. 11s. per ton, 1438; labour, six men, at 2s. per day, 280 days, 168; material for repairing the furnace, laboratory, office expenses, &c., 800; general expenses, 500.—3556.—The produce would be about 210 tons of regulus, containing 30 per cent. of copper, the value of which, at 15s. per unit, would be 222. 10s. per ton, or 4725; for the whole, leaving a profit for one furnace of 1169.

No royalty has to be paid for the first five years after the works have been started, and after that 5 per cent. of the raw produce, or its value, is all that is claimed by Government. There are some old ironworks and one-fourth of an English mile from the mines now for sale, with an area of about 34 acres of land, and water power the whole year round of about 50 horses. These may be bought now very cheap, and they would be just the most convenient place for smelting the ore. Of course, the more factories employed at once the greater will be the returns, and a company starting with a capital of about 30,000, to 40,000, would do an exceedingly good business here; but the want of enterprise among the local inhabitants, and the neglected state of industry in this country, have so far prevented anything being done in the matter. If it is recollected that the reigning Duke is the brother of the late Prince Albert, that his government is the most liberal in all Germany, and that the next heir to the throne is an English Prince, Englishmen need not be afraid that English interests will be neglected in this country.

L. K.

TIN DRESSING.

SIR.—Much misunderstanding having been displayed by directors and others respecting the cost and difficulties attendant on tin dressing, even with the best appliances, I think a few remarks on the subject may not be unacceptable. The misunderstanding too frequently arises from an ignorance of the composition of the lode-stuff to be treated; it is technically termed; being comparatively free from "brood," as it is technically termed; some, greatly fouled, and separated therefrom with the greatest difficulty; some, again, are mixed with a light matrix, others with a heavy gangue.

As reflections and blame are frequently undeservedly attached to agents from these causes, by non-practicals, I do hope a few explanatory observations may plead for a class of men who, I firmly believe, are doing all in their power for the advancement of a delicate and tedious process. In their power for the advancement of a delicate and tedious process, doing so I do not know that I can do better than in drawing comparisons of the lodes of some mines with which I am tolerably conversant, and some of which I have very recently examined. As I am at Chacewater, I will commence with its near neighbour and well-known mine, Great Wheal Busy. The tinstuff is of a dead black, heavy capel, highly impregnated with a ponderous yellow mud, copper ore, oxide of iron, and blende. The tin being in minute atoms throughout the stone, necessitates its being stamped very low or fine, so as to render it nearly an impalpable powder, as a natural consequence, renders it difficult and expensive both for calcining and dressing. The tin from this mine differs materially from the following in its nature; it yields good metal, but the produce is low, hence the comparatively high cost incurred.

At the St. Day United Mines, on the south, they have only a small portion of munda and fluor-spar; it is free from the capel, copper, &c., previously described. They have wolfram—a troublesome companion, that cannot be separated by water: calcination must be resorted to, and Great Wheal Busy can be drawn in the cost of dressing between it and Great Wheal Busy.

At Wheal Kitty and Polberro Consols (St. Agnes) they have a beautiful light killas, quartz, and peach, with rough-grained "bold" tin. The tin from these mines is of high produce.

At Pedn-an-drea the tinstuff is of quartz, peach, munda, and copper, with blende and fluor-spar; it is easily stamped, but is of low produce, and requires to be all calcined, which process takes out a large quantity of arsenic, as it does, in fact, in all mines, but when rendered marketable is an excellent quality tin.

At Carn Brea the tin is mixed with quartz, peach, a little copper, munda,

It is stated that a company is about to be formed to develop some valuable tracts of land in Venango County, Pennsylvania, U.S., the site of the lubricating petroleum wells. The proposed capital will, it is said, be about 200,000.

[illegible]

BRITISH MINES.

HOLLOWAY'S OINTMENT AND PILLS—EFFECTUAL AID.—In the struggle of life it is cheering to know that a remedy does exist, and this can be proved beyond all doubt. Holloway's ointment and pills are always useful in relieving inflammation, and regulating disordered actions. They never can be misapplied, nor can they under any circumstances cause mischief. They are a blessing to those who are tormented by indigestion, gout, skin diseases, &c., and a precious boon to the thousands who are afflicted with rheumatism, sciatica, &c. In the possession of all soldiers, sailors, and emigrants, who will often be in the position to ease pain and cure disease when medical assistance cannot be obtained.

wide, yielding $1\frac{1}{2}$ ton of ore per fm.—Reed's Shaft: In the 80 west the lode is 4 ft. wide, with spots of lead ore, but not to value. Stopes and pitches throughout the mine continue to yield their usual quantities of ore. We have this day sampled 75 tons of lead ore.

rich stones of ore. I feel satisfied this will lead to an independent discovery, and which very possibly will be of some magnitude.

[illegible]

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efficiency of the remainder of the property. The report also shows that there are 300 tons of slate, and an immense quantity of slabs on the quarry, which will be applied towards the dividend for the current year. Extension of the planing-machinery has also been put up for preparing the slate for market, and there seems no reason to doubt that the returns of slate in the coming year will be considerably augmented. All accounts seem to confirm the statement that this is one of the most important slate producing districts in Wales within the present century. From the report it also appears that the company have purchased the royalties, and agreed to all compensation for damage for the period of 40 years, and that they have added 300 acres of land to the original grant, free of royalty also.

The following are the Government Returns of the exports of articles identified with mining, the produce and manufacture of Great Britain, for the six months ending June 30, 1865; and also as compared with the six months ending June 30, 1864; extracted from the "Accounts relating to Trade and Navigation," published by the Board of Trade:—

DECLARED VALUE FOR THE SIX MONTHS ENDING JUNE 30.	1864.	1865.	Decrease.
Coal and culm	£1,939,644	£2,064,423	
Hardware and cutlery:—			
Surgical instruments ..	£185,459	£184,301	
Agricultural implements ..	245,345	268,113	
Other sorts	1,527,639	1,595,414	1,536,066=1,989,380
Machinery:—			
Steam-engines	733,185	990,671	
Others	1,326,473	2,059,628	1,502,082=2,592,753
Total	£5,937,686	£6,638,566	
Metals:—Iron—Pigs	728,652	897,893	
Bar	1,426,090	1,485,424	
Railroad	1,789,938	1,812,333	
Wire	105,005	101,925	
Castings	325,198	336,797	
Hoops	904,461	663,388	
Wrought	1,099,909	1,130,000	
Old	9,998	6,887,053	4,479=5,605,786 .. £981,267
Steel	514,462	324,984	189,478
Copper—Wrought	258,585	131,457	
Wrought	1,145,167	1,278,787	
Other sorts	41,820	98,335=1,304,179	109,370
Brass	397,533	231,192	
Lead—Pigs	82,169	81,838=318,030	166,972
Or	246,174	222,951	23,223
Tin—Wrought	776,103	703,411	72,692
Tin—Plates	65,091	43,041	21,990
Grand total	£16,169,088	£15,461,908	£1,455,922
Less increase—Coal and culm, 114,779; hardware and cutlery, 29,661; machinery, 533,128; copper, 60,971; brass, 9,651. }			748,742
Total decrease			£ 707,180

At Camborne Ticketing, on Thursday, 2970 tons of ore were sold, realising 14,654d. The particulars of the sale were:—Average standard, 111. 2s.; average produce, 6s.; average price per ton, 4s. 19s.; quantity of fine copper, 205 tons 2 cwt. The following are the particulars:—

Date.	Tons.	Standard.	Produce.	Price per ton.	Per unit.	One copper.
July 6 ..	3565	111 2	6	4 20	3 1/2	68 10
July 7 ..	423	120 10	6	3 16 6	14	70 6 6
July 8 ..	3163	113 9	6	4 5 6	3 1/2	68 10
Aug. 3 ..	2970	111 2	6	4 19 0	14	71 7 0

Compared with last week's sale, the advance has been in the standard 17. 5s., and in the price per ton of ore about 1s. 6d. Compared with the corresponding sale of last month, the standard has slightly advanced.

The following dividends were declared during the month of July:—

Mine.	Per share.	Amount.
Devon Great Consols	£3 0 0	£9216 0 0
South Caradon	7 0 0	3584 0 0
East Caradon	10 0 0	3072 0 0
West Valley	0 5 0	1500 0 0
Mark Valley	0 2 0	900 0 0
Cwmystwith	5 0 0	640 0 0
Brodford	0 10 0	500 0 0
Port Phillip	0 1 0	4875 0 0
Victoria (London)	—	1562 0 0
Total		£35,549 0 0

At Whal Bassett meeting, on Tuesday, the accounts for the two months showed a profit of 669l. A dividend of 198l. (11. 10s. per share) was declared, and 1185l. carried to the credit of next account. The copper ore to come to the credit of next account will exceed the present by 500l., so that it will not be necessary then to reduce the balance. The tin credited on Tuesday is greater than for many years past; the cross-cut towards Padric's lode is very encouraging for a good bunch of ore. The prospect for copper will look well, and if they should, as they anticipate, meet with valuable ore ground in the 40, these shares would have a good rise.

At Bronfloyd meeting, on Monday (Mr. Thos. Miers in the chair), the accounts showed balance of cash in hand 967l. 9s. 2d., from which a dividend of 500l. (10s. per share) was declared.

At Rosewarne United Mines meeting, on July 26, the accounts showed a credit balance of 1071. 11s. 4d. There are employed in the mine 53 men on tutwork and 20 men on tribute. They sampled on July 26, 155 tons of copper ore, which it is expected will realise about 1100l. A steam-wind and crusher are to be erected forthwith, and the purser was desired to purchase such machine as he thinks best fit. The management of the mine is to be conducted by Messrs. Thomas Richards and Son, at a salary of 10l. 10s. per month.

At Whal Emily Henrietta meeting, on July 24, a call of 10s. per share was made.

At the Whal Edward Mine meeting, on Wednesday (Mr. Fielding in the chair), the accounts showed a debit balance of 1992. 13s. 11d., and a call of 3s. per share was made. The report of the agent stated that, under present circumstances, and the exceedingly depressed state of the copper standard, he thought it would be most desirable to confine the principal underground operations for the next four months to pumping the drive of the 61 fm. level west by a full pair of men, where they had over 30 fms. of unexplored ground, and in the event of some important improvement, or coming in contact with a masterly cross-course, or something to facilitate the drive of cross-cuts towards the side lode, a ventilating shaft would be immediately necessary, although it can be avoided for the present without any great disadvantage to the proposed mode of operation. The cost would be about 55l., against which they hoped to make about 30 tons of copper ore, without calculating on any further improvement. The committee of management were re-elected.

At the Leawood Mine meeting, yesterday (Mr. P. Wright in the chair), the accounts showed a debit balance of 1260l. 8s. A call of 12s. 6d. per share was made.

At Clijah and Wentworth Mine meeting, on July 24, a call of 10s. per share was made.

At Whal Buller meeting, on July 26, the accounts showed a credit balance of 1101. 0s. 10d. The agents' report appears among the Mining Correspondence.

At Gonamena Mine meeting, on July 27, the accounts showed a credit balance of 2131. 10s. 11d. A call of 2s. 6d. per share was made. Capt. R. Pascoe, in his report, says:—Our sale of ore to-day is 158 tons. The tin sold in the past two months to be brought into this account realised 711. 3s. 4d.

At the Penhalla Mine meeting, on Tuesday (Mr. Cheston in the chair), the accounts showed a debit balance of 1377. 4s. A call of 2s. per share was made.

At the East Great Work Mine meeting, on Wednesday (Mr. Chambers in the chair), the reports and accounts were adopted. It was resolved to wind-up voluntarily, with a view to re-establish the company, and vigorously develop the mine. Details in another column.

At the Prince of Wales Slate Company second ordinary general meeting of shareholders, held at the company's offices, Old Jewry Chambers, on Monday (Lieutenant-Colonel H. Garnet Man in the chair), the manager read the report and carried unanimously, when it was moved by the Chairman, seconded by Mr. Philip Chaplin, and carried unanimously, that the report and accounts be received and adopted. Lieutenant-Colonel H. Garnet Man, Messrs. Philip Chaplin, W. Stirling, J. Francis, and Charles Downes, who retire from the office of directors, but who are eligible for re-election, with the exception of Mr. J. Francis, offered themselves for re-election accordingly, and they were re-elected. Mr. James Maw was elected a director of this company. It was moved by Mr. C. W. Stiles, seconded by Mr. T. W. Brittain, and carried unanimously, that the directors be paid 260l. as remuneration for their services for the ensuing year. Mr. H. Morgan, the auditor of the company, is to be paid 10l. as remuneration for his services for the ensuing year, and to be paid 10l. for his services.

At the Llanfair Green and Blue Slate Company second ordinary general meeting of shareholders, held at the offices of the company, Old Jewry Chambers, on Monday (Lieutenant-Colonel H. Garnet Man in the chair), the manager read the report and carried unanimously, when it was moved by the Chairman, seconded by Mr. Downes, and carried unanimously, that the report and accounts be received and adopted. Lieutenant-Colonel H. Garnet Man, Messrs. Philip Chaplin, W. Stirling, Charles Downes, and James Maw, who retire from the office of directors, but who are eligible for re-election, with the exception of Mr. J. Francis, offered themselves for re-election accordingly, and they were re-elected. It was moved by Mr. Brittain, seconded by Mr. Stiles, and carried unanimously, that the directors be paid 250l. as remuneration for their services for the ensuing year. Mr. H. L. Morgan, the auditor of the company, is to be paid 10l. as remuneration for his services for the ensuing year, and to be paid 10l. for his services.

At the Frank Mills Mine meeting, on Tuesday next, the accounts will show a profit on the three months' working of 1461. 4s. 4d., and a dividend of 6s. per share will be recommended. Since last meeting the new air-shaft has been sunk to the level of 40 fms., and the agents report that about 3 fathoms more is required to be driven through to the level of 45 fms., with the large deposit of lead in the north part of the mine. The air-shaft has been completely reworked from the surface to the 45. When the new shaft is completed a greater number of men can be profitably employed.

At the Consolidated Copper Mines of Cobre Association meeting, on Monday (Mr. H. Strevens, General M.P., in the chair), the accounts showed a profit on the three months' working of 1000l. The sum of 101l. has been returned in dividends on the shares. Mr. Drane was elected director, and Mr. W. H. Chellis auditor. Details will be found in another column.

At the Port Phillip and Colonial Gold Mining Company (half-yearly) meeting, on Monday (Mr. J. D. Powles in the chair), a distribution was made of 1s. per share (free of income tax), on account of the profits made to the end of May. Details in another column.

At the Victoria (London) Mining Company meeting (Mr. J. D. Powles in the chair), a dividend of 8 p. cent. (for the half-year), was declared. Details elsewhere.

At the Marquitta and New Granada Mining Company (annual) meeting, on Monday (Mr. R. A. South in the chair), the report of the directors was adopted. Details in another column.

At the Australian Mining Company annual general meeting, on Monday (Mr. G. Palmer in the chair), the accounts showed a credit balance of 807l. 17s. 7d. Details in another column.

At the English and Australian Copper Company meeting the question of placing the company under the Limited Liability Act was discussed, and great satisfaction was expressed at the proposed change. The necessary formal meetings will be held for authorising the registration. Details in another column.

The Bank of England Returns for the week ending Wednesday evening again show a considerable reduction in the reserve, principally owing to the heavy withdrawal of private deposits; the consequence has been that the Bank rate has been increased 1/4 per cent., much to the surprise of a large number of the great money dealers, who are accustomed to pay too much attention to the bill and securities movements, which are more readily observable. The rate of discount is now 4 1/2 per cent. Notwithstanding this change the return generally is by no means unsatisfactory. The notes issued, as compared with the preceding week, showed an increase of 755l. only; the notes in circulation an increase of 574,760l.; public deposits, increase, 443,475l.; other deposits, decrease, 1,258,067l.; Government securities in banking department, decrease, 1,700l.; other securities in banking department, decrease, 112,371l.; coin and bullion in both departments, decrease, 46,031l.; seven day and other bills, increase, 35,743l.; the rest, increase, 28,504l.; and in the notes in reserve, decrease, 574,005l. The total reserve of notes and coin in the banking department now stands at 6,461,318l., against 7,082,102l. last week, showing a decrease of 620,791l.

At the London and County Bank meeting, on Thursday (Mr. W. C. Jones in the chair), the accounts showed that the profits for the half-year ending June 30 amounted to 106,821l., making a total for appropriation of 125,450l., including 13,629l. brought forward. The usual dividend of 6 p. cent., and a bonus of 9 p. cent., were declared, free of income tax, making together 15 p. cent. for the six months, and 13,660l. is left to be carried forward to profit and loss account. During the half-year 2944 new accounts have been opened, and the cash balances from the public have increased by 1,124,518l. The details of the proceedings and report of the directors will be found in other columns.

At the European Bank meeting, on Monday next, the directors' report will show a profit (including 272l. brought forward) of 29,555l. It is proposed to apply 16,380l. for the payment of an interim dividend, being at the rate of 5 p. cent. per annum, free of income tax; that 3000l. be written off premises, purchases, and preliminary expenses accounts; and that the balance, 10,105l., be carried to profit and loss account, to be dealt with at the close of the financial year, when the premium accruing from the transfer of the business of the late London, Birmingham, and South Staffordshire Bank will also be available.

At the Mediterranean Extension Telegraph Company meeting (yesterday (Mr. H. Moor in the chair), the report was unanimously adopted. The Chairman stated that, notwithstanding the suspension of the Malta and Alexandria line, their traffic receipts had amounted to 5716l., while there had been a decrease in expenses. The usual dividend of 8s. per share, equal to 8 p. cent. per annum, on the preference capital, and 2s. per share, equal to 2 p. cent. per annum, on the original shares, the former subject to, and the latter free of, income tax was declared. There was at the same time a sum of 400l. to be placed to the credit of the reserve fund, and 40l. to be carried over to the next account.

At the London and Glasgow Engineering and Iron Shipbuilding Company meeting, on Thursday next, the report will show that after reserving 6300l. for depreciation of buildings, machinery, &c., writing off 1000l. for preliminary expenses, and deducting the interim dividend paid in February, there will remain a balance of 4813l. A distribution equal to about 10 p. cent. will be recommended.

At the United Kingdom Railway Rolling Stock Company (Limited) fifth half-yearly meeting, on Monday (Mr. John Biddulph in the chair), a dividend at the rate of 7 p. cent. per annum was declared, free of income tax, carrying over a balance of 299l. 2s. 3d. to the next half-year.

At the Gas Products Utilising Company half-yearly general meeting, on Wednesday (Mr. A. A. Croll in the chair), a dividend at the rate of 5 p. cent. was declared, making 10 p. cent. for the year. Details in another column.

At the Land Securities Company meeting, on Monday (the Right Hon. Lord Naas, M.P., in the chair), the accounts showed a net profit for the year ending June 30 of 2614l. 18s. 9d., the whole of which the directors proposed to carry forward. Shortly after the previous general meeting it became apparent to the directors that it was essential to the successful working of the company that parliamentary recognition should be obtained of the system of mortgage debentures, which forms the basis of its operations. The efforts of the board, aided by Lord Naas, have resulted in the passing of the "Mortgage Debenture Bill" under the provisions of which the company will be enabled to issue mortgage debentures bearing the endorsement of the Registrar of the Public Office of Land Registry as evidence that all the requirements of the Act have been complied with. The company will at once avail itself of the provisions of the Act, and the directors have placed themselves in communication with the authorities, with a view to settle without delay the necessary rules and regulations provided for by the statute. It is, therefore, expected that business will be immediately commenced under the new system. The Chairman having explained the nature and advantage of the company's system, Mr. Parmenter observed that the working expenses appeared to be about 9 p. cent. on the gross capital, exclusive of brokerage and commission on loans. He thought agents ought to be appointed in all the principal towns, and that they should be paid by commission only, and not by salary. He thought, too, they should try and make their mortgage debentures easily negotiable. The Chairman explained that during the last six months their current expenses were reduced from 600l. to 300l., and he did not think there was any chance of their being increased; they had reduced salaries from 1156l. to 976l., and they hoped as they went on to make considerable reduction in the whole of their expenditure. Mr. J. H. Lloyd explained that with respect to the negotiability of their debentures they were limited by Act of Parliament; they will pay by endorsement, but not from hand to hand, as was the case on the Continent; the endorsement, however, was as simple as could be.

The directors of the Quebrada Company, in forwarding to the shareholders a notice convening an extraordinary general meeting, have submitted a very lengthy statement of all their acts and management from the formation of the company up to the present time. It concludes by stating that the directors, feeling conscious that they have never for a moment lost sight of the true interests of the company, or to the best of their ability failed in their duty, either by neglect or inattention, they place themselves in the hands of the shareholders, and if they think the present directors have either failed in the management, or that others can do better, they will only be too happy to resign their seats. There are already four vacancies in the direction, occasioned by the resignation of Mr. Neish, Mr. Stock, Mr. Hallett, and Mr. Wright, which the directors have not thought fit to fill up, preferring to do so in accordance with the wishes of the shareholders. They would simply point out, however, that already the larger part of the best season of the year in Venezuela has been partially lost through the action of the board having been, to a great extent, paralysed by the continued agitation which has been kept up, and hence, the continuation of this agitation will inevitably be in the ruin of the company.

We understand that Mr. Edward Davies, of Dolgarrog, has bought both Rhoswydd and Bacheiddon Mines, machinery, and materials, and it is the wish of all that the speculation will turn out profitable to the new proprietor.

COAL MARKET.—The fresh arrivals this week reached 170 ships. The demand for all descriptions of coal has continued active, and nearly the whole quantity found buyers at the closing prices of last week. Hutton Wallend, 20s.; Haswell Wallend, 20s.; South Hutton Wallend, 20s.; Hartlepool Wallend, 21s. 6d.; Tees Wallend, 19s. 6d.; Braddyall's Wallend, 19s.; Eden Main, 18s. 6d.; Russell's Hutton Wallend, 18s. 6d.; Heugh Hall Wallend, 18s. 9d.; South Kellow Wallend, 18s. 9d.; Hutton Lyon's Wallend, 18s.; Tunstall Wallend, 18s.; 4 cargoes unsold; 25 ships at sea.

ATLANTIC AND GREAT WESTERN RAILWAY.—Mr. E. F. Satterthwaite, in his Circular says:—"The following notice has been posted on the Stock Exchange:—'I have to inform you that we have received from New York remittances amounting to 31,000l., on account of the trustees of the Atlantic and Great Western Railway, for interest account.—W. C. Boone, manager, Consolidated Bank.' We are glad to see this, the commencement of regular monthly remittances. Supposing a similar amount to be sent over each month during the year, it would amount to 372,000l., or sufficient to pay 8 p. cent. on 4,650,000l., which latter sum is more than the total indebtedness of the company. It is thus evident that both bonds and debentures offer a very desirable medium for investment, and the 1 p. cent. debentures (being in sterling, with coupons attached guaranteed by the Consolidated Bank), which can at present be purchased at 85, afford an opportunity of obtaining 9 p. cent. interest for money invested, besides the bonus of 14 p. cent. on redemption of two years and a-half. The traffic return for June shows a steady increase; it amounts to 5014,922, being 1598 p. mile. The Illinois Central for the same month took 550,061, or 8780 p. mile. The Atlantic and Great Western traffic is calculated on 322 miles, being all the length that can be fairly said to be worked, as only occasional trains run on to Dayton; but, taking the additional mileage from Akron to Dayton into consideration (185 miles), this gives a mileage of 508, on which the receipts would be 1011l. against the Illinois Central, 780l."

GREAT DARREN SILVER-LEAD MINES.—Important discoveries have been made in this mine during the last fortnight, which will lead to results of great interest to the shareholders. They are working Oliver's level, towards the old mine, upon the course of the lode. A great change has taken place in the strata, and the lode is improving in value. Water is percolating through the rock in every direction, which proves that the driving approaches very near the old mine, which is known to be rich in deposits to the west of the present end. There are always impediments to enterprises beneath as well as upon the surface of the earth, but there is every prospect that the main difficulties in developing this valuable property have been overcome, and that the shareholders will soon have reason to congratulate themselves upon the attainment of the desired end.

THE RUN OF GROUND AT WHEAL CLIFFORD.—Lost ramour, as usual, should magnify the reported disaster, said to have occurred at these mines, I beg to say the facts of the case are as follow:—For some time past it has been known that the back of the 200 fm. level was in a critical position, and large quantities of timber have been appropriated to prevent any untoward accident; great difficulty was found in doing this work, as may be easily supposed, when it is known the gunnies was 30 ft. wide, and all the ore taken away; fortunately, no one was injured when the crash actually took place; the greatest amount of real damage will be done by the fall of the rock, but on the other hand, the cost of securing this dangerous place will be avoided. As the mine is sunk 20 fms. below the 200, and the ore still holds on, all that will be necessary will be to drive beneath the crash, and secure as they go; instead of being a permanent disadvantage, as has been asserted, it is abso-

lutely a benefit to the mine. As there are certain parties who make a handle of everything to depreciate property for unworthy purposes, I beg your insertion of facts, to prevent anything like panic amongst shareholders; they may depend on it this matter need not cause them alarm, or to in the least affect their interests beyond the amount before mentioned. Happening to be in the locality at the time of the accident, I made it a point to ascertain the accuracy of the report "that a calamity had occurred at Clifford that would probably ruin the mine." If evil report has it so here, what dimensions may it not assume by repetition?—GEORGE HEWWOOD.

OUR MINERAL WEALTH.—The total value, at the place of production, of the minerals obtained in 1864 (exclusive of building stones, bricks, and the like) was 31,604,047l. The value of the metal smelted from the metalliferous ores was 15,281,869l., so that if we add to this the value of our coals at the pit's mouth, 23,197,968l., and 1,500,000l., the estimated value of the other earthy minerals (of which particulars are given in another column), we have as the aggregate value of our mineral treasures, 39,979,837l.

STRIKE OF QUARRYMEN IN NORTH WALES.—A strike has taken place of the quarrymen employed at the Penrhyn Slate Quarries, belonging to Colonel Pennant; 500 of the men have left their work, and 3000 will, it is said, be out before the close of the present week. The men are holding public meetings, and they complain of having had to suffer great hardships.

TRETOIL AND MESSER MINING COMPANY.—Vice-Chancellor Sir W. P. Wood proposes, on August 3, to make a call of 4s. per share on the contributories of this company.

MOTIVE-POWER.—Mr. D. C. Keab, of Abingdon-street, Westminster, has patented the use of an overhead water-wheel, placed three-paces under water (or liquid metal) as an apparatus to produce motive-power.

WEATHER PREDICTIONS.

Sir,—In the last paragraph of my letter last week, after giving the movements of the weather phenomena, I stated—"I do not see there is anything to fear from the weather for the harvest." I must, however, inform your agricultural readers that they had better take every interval of fine weather, as it occurs, to secure their crops, and by no means to expect a return of the late extremely fine weather we have experienced. This is the only advice I can give them. The weather for the month commenced exactly as foretold in my letter in last week's Journal.

Throgmorton-street, August 4. G. SHEPHERD, C.E. Author of the "Climate of England."

* * The MINING JOURNAL is published in time for dispatch by the early mails on Saturday, and should be delivered with the usual morning papers of that day. In cases of irregularity, we recommend that orders be given to Messrs. Smith, or other active agents, who will readily undertake to supply it.

LEAD ORES.

Date.	Mines.	Tons.	Price per ton.	Purchasers.
July 26—	Minera Boundary, &c.	10	12 7 6	Newton, Keates, & Co.
— ditto	.....	10	12 7 6	Walker, Parker, & Co.
July 29—	Harwood	20	12 16 3	Walton & Co.
July 31—	Isla de Man Mining Co.	100	14 4 0	Burry Port Co.
—	East Lloyds	60	11 18 0	Panther Co.
—	Glogfack	70	15 6 0	Newton, Keates, & Co.
—	Cwmystwith	75	11 18 0	Sims, Williams, & Co.
— ditto	.....	25	11 18 0	Panther Co.
—	Frank Mills	60	17 10 0	Burry Port Co.
—	ditto	85	11 17 6	Panther Co.
Aug. 3—	Cashwell	40	13 8 9	.....

BLACK TIN.

Date.	Mine.	Tons.	Price per ton.	Amount.	Purchasers.
July 29—Leeds & St. Aubyn ..	6 17 0	12	£36 10 0	£366 10 0	Chyndour.
Aug. 2—Phoenix	13 12 17	—	—	£50 12 9	—
—St. Day United	58 13 1 2	—	—	2880 18 11	—

BLENDE.

Date.	Mine.	Tons.	Price per ton.	Purchasers.
July 31—Great Laxey	300	£3 17 0	—	Vivian & Sons.

COPPER ORE.

Date.	Mine.	Tons.	Price per ton.	Purchasers.
Aug. 1—Great Laxey	120	£3 18 6	—	H. Baxter.

COPPER ORES.

Sampled July 19, and sold at Tyack's Hotel, Camborne, Aug. 3.

Mines.	Tons.	Price.	Mines.	Tons.	Price.
Clifford Amalgamated ..	105	£6 0 0	West Wheal Seton ..	26	£3 0 0
ditto	94	3 18 0	South Wheal Crofty ..	105	7 8 6
ditto	87	3 10 6	ditto	84	2 11 6
ditto	79	3 12 6	Wheal Bassett	58	9 7 6
ditto	76	2 2 6	ditto	45	4 11 0
ditto	67	8 5 0	ditto	40	5 17 6
ditto	63	7 2 6	ditto	38	2 19 0
ditto	63	5 8 0	East Wheal Grenville ..	55	3 4 6
ditto	50	4 11 0	ditto	35	3 12 0
ditto	49	4 7 6	ditto	34	6 3 6
ditto	30	3 15 0	ditto	12	3 16 6
Consols	47	6 15 6	East Pool	76	3 11 6
Wheal Seton	14	3 7 0	ditto	49	3 3 6
Pendarves	98	1 2 0	Dolcoath	39	4 16 6
ditto	91	5 7 6	ditto	30	4 7 0
ditto	70	5 0 0	ditto	28	5 13 6
ditto	60	4 15 0	West Tolgus	48	4 14 6
ditto	54	7 7 6	ditto	47	4 10 0
ditto	40	5 14 0	ditto	23	4 14 0
ditto	38	4 1 6	East Bassett	41	5 0 0
ditto	6	1 17 0	ditto	40	8 10 6
West Wheal Seton ..	91	4 7 0	ditto	19	2 15 6</

WATSON AND CUELL'S MINING CIRCULAR.

WATSON AND CUELL.

MINING AGENTS, STOCK AND SHARE DEALERS, &c.,
1, ST. MICHAEL'S ALLEY, CORNHILL, LONDON.

Messrs. WATSON and CUELL having made arrangements for transferring their weekly Circular, which has had so large a circulation during the past ten years, to the columns of the *Mining Journal*, their special reports and remarks upon Mines and Mining, and the state of the Share Market, will in future appear in this column.

In the year 1843, when Cornish mining was almost unknown to the general public, attention was first called to its advantages, when properly conducted, in the "Compendium of British Mining," commenced in 1837, and published in 1843, by Mr. J. Y. Watson, F.G.S., author of "Gleanings among Mines and Miners," "Records of Ancient Mining," "Cornish Notes" (first series, 1862), "Cornish Notes" (second series, 1863), "The Progress of Mining," with Statistics of the Mining Interest, annually for 21 years, &c., &c. In the Compendium published in 1843 Mr. Watson was the first to recommend the system of a "division of small risks in several mines, ensuring success in the aggregate," and Messrs. Watson and Cuell have always a selected list on hand. Perhaps at no former period in the annals of mining has there been more peculiar need of honest and experienced advice in regard to mines and share-dealing than there is at present; and, from the lengthened experience of Messrs. Watson and Cuell, they are emboldened to offer, thus publicly, their best services to all connected with mines or the market, as they have for so many years done privately, through the medium of their own Circular.

Messrs. WATSON and CUELL transact business in the purchase and sale of mining shares, and other securities, payments of calls, receipt, and transmission of dividends, obtaining information for clients, and affording advice, to the best of their knowledge and judgment, based on the experience of more than 30 years active connection with the Mining Market.

Messrs. WATSON and CUELL also inform their clients and the public, that they transact business in the public funds, railways, docks, insurance, and every other description of shares dealt in on the Stock Exchange.

Messrs. WATSON and CUELL are almost daily asked their opinion of particular mines, as well as to recommend mines to invest or speculate in, and they give their advice and recommend mines to the best of their judgment and ability, founded on the best practical advice they can obtain from the mining districts, but they will not be held responsible, nor subject to blame, if results do not always equal the expectations they may have held out in a property so fluctuating as mining.

Messrs. WATSON and CUELL having agents and correspondents in all the mining districts, and an extensive connection among the largest holders of mining property, have the more confidence in tendering their advice on all matters relating to the state and prospects of mines and mining companies, and are enabled to supply shares in all the best mines at close market prices, free of all charges for commission.

WHEAL TRUSCOTT.—The adit is being driven with all speed, branches of ore being constantly met with, and the ground is very congenial.

AT DYFFRYN CASTELL, in the 15 cross-cut south the lode has a very promising appearance, containing good stones of steel-lead ore, and in congenial ground for mineral.

THE PRINCE OF WALES MINE is showing indications of the success we have always anticipated.

THE WHEAL PENROSE AND UNITY MINES COMPANY (LIMITED).

Capital £30,000, in 6000 shares of £5 each.

10s. to be paid on application, and 10s. on allotment. No call to exceed 10s. per share, and at intervals of not less than three months.
It is not expected that more than £2 10s. per share will be required.

DIRECTORS.

THE REV. OCTAVIUS FREIRE OWEN, M.A. (Director of the Washoe Company), 23, Carlton-hill East, St. John's Wood. [Park]
Lieut.-Col. BODDAM (Director of the Washoe Company), 16, Queen's-gardens, Hyde Park. [Wood]
JAMES HENDREY, Esq. (Director of the English and Foreign Credit Company), 78, Warwick-square, Piccadilly. [Wood]
W. A. HUNT, Esq. (Director of the Washoe Company), 10, Clifton-road, St. John's. [Wood]
Capt. J. W. JONES, East India United Service Club, St. James's-square. [Wood]
ROBERT WEBB, Esq., Carnarvon House, East India-road, Poplar. [Wood]
(With power to act to their number.)

BANKERS—London and County Bank, Lombard-street.

BROKERS—George Hunt, Esq., 75, Old Broad-street.

SOLICITOR—J. Richardson, Esq., 15, George-street, Mansion House.

SECRETARY—J. W. Lukis, Esq.

OFFICES.—2, COPTHALL CHAMBERS, THORGMORTON STREET.

PROSPECTUS.

The Wheal Penrose and Unity Silver-Lead Mines are situated in one of the best known and most important lead-producing districts of Cornwall, and have yielded large profits. They are in the neighbourhood of the Great Wheal Vor and Great Wheal Fortune Mines. In 1859 Mr. John Hunt, for many years director and principal proprietor of the Pontean Lead Works, near Rennes, France, obtained a grant from J. J. Rogers, Esq., for the purpose of working the lodes. The mines have been purchased by the vendor from Mr. Hunt, and this company will work under a lease for 21 years from December 1, 1863, at a royalty of only 1-20th. In the course of Mr. Hunt's explorations he has discovered an important lode, nearly parallel to the workings, at a distance of about 3 or 4 fathoms. The formation is an argillaceous clay-slate of a highly mineralized character. Large profits were realized by the late Sir Christopher Hawkins, and it is now proposed to work a great extent of unexplored ground between the two mines, and also certain valuable lodes discovered within the last few weeks, one of which, of great richness, is 4 ft. wide.

Of the 6000 shares, 1600 fully paid-up will be delivered to the vendor, towards the purchase of the mine, and 4400 not paid-up will be offered to the public. The vendor has evinced his confidence in the undertaking by agreeing to receive seven-eighths of the purchase money in shares, and it must not be forgotten that the works are already in operation, and yield steady returns.

There is a good road to the thriving harbour of Portlleven, within half a mile of the works. The average value of the silver-lead now being raised is about £15 2s. 6d. per ton, and the reports from Capt. Francis and James, annexed to the prospectus, prove their high estimation of this valuable property. It may be added that the results of Mr. Hunt's own workings, up to the present time can be shown by authentic and regular accounts to have been during the last five years most satisfactory, and that only a moderate capital is thought requisite to increase the returns very largely of this property.

Specimens of extremely rich ore, recently dug from the mines, can be inspected at the offices, 2, Copthall Chambers, Thorgmorton-street.

FORM OF APPLICATION FOR SHARES.

To the Directors of the Wheal Penrose and Unity Mines Company (Limited).
GENTLEMEN.—Having paid to your credit with the London and County Bank the sum of £ , I hereby request you will allot me shares in the Wheal Penrose and Unity Mines Company (Limited), and I hereby agree to accept such shares, or any smaller number that may be allotted to me, and to sign the Articles of Association of the company when required.
Name in full
Address in full

Date.....

BANKERS.

THE TAQUARIL GOLD MINING COMPANY (LIMITED).
IN THE PROVINCE OF MINAS GERAES.
To be incorporated under the Companies Act, 1862, whereby the liability of shareholders is limited to the amount of their shares.

Capital £75,000, in 15,000 shares of £5 each.

No deposit will be required on application, and no shares will be allotted unless two-thirds are applied for.

10s. on allotment, £1 in three months, and £1 in six months.

No further call without six months' notice.

BANKERS.—The London and County Bank, and branches.

BROKERS.—Messrs. George Burnard and Co., Lombard-street.

Messrs. Taunton and Co., York-buildings, Liverpool.

SECRETARY—J. C. Goodman, Esq.

OFFICES.—9A, GREAT ST. HELEN'S, BISHOPSGATE STREET.

This company has been formed for the purpose of purchasing and working gold mines in Brazil; and with this object in view the directors have entered into a provisional contract for the purchase of the famous Taquaril Mine, upon the following advantageous terms, viz.:—£16,000 in cash, to be paid by instalments, and £10,000 in 4000 shares, with £2 10s. paid thereon.

The estate of Taquaril adjoins the Morro Velho estate, belonging to the celebrated St. John del Rey Mine, and is about four miles from that mine, which has returned to its proprietors no less than £850,000 in dividends, upon an outlay of £128,000.

Mr. Lanyon states in his report—"I have taken out about 100 lbs. weight of gold in so small a space as from 10 to 12 ft. of this lode." 100 lbs. weight of gold is worth upwards of £4000.

The Taquaril estate is freehold. The lodes run through it at a distance of about six miles.

No money will be paid to the vendors until the legal advisers of the company in Brazil have certified that the estate has been duly conveyed.

Some specimens of the gold from this mine have long since been deposited in the department of auriferous ores in the British Museum.

In order to avoid unnecessary trouble to applicants, no deposit will be required on application, and no shares will be allotted unless two-thirds are applied for.

No promotion money will be paid.

Applications for shares can be made, and prospectuses, reports, and all information obtained, at the company's offices, where plans may be seen; of the brokers, solicitors, &c.

MR. D. STICKLAND, M.E., having had upwards of 40 years' mining experience in Cornwall, several years of which he has had the entire management of mines therein, enables him to GIVE GOOD ADVICE thereon.

MINES INSPECTED AND FAITHFULLY REPORTED ON. DEALER IN MINING, RAILWAY, AND OTHER SHARES.

His monthly Circular forwarded on receipt of six postage stamps.
Criddle Mine, St. Ise, Padstow, Cornwall.

Notices to Correspondents.

* Much inconvenience having arisen in consequence of several of the Numbers during the past year being out of print, we recommend that the Journal should be regularly filed on receipt: it then forms an accumulating useful work of reference.

MR. CANBY reader inform me if a body of shareholders holding the majority in a mine worked on the cost-book principle can change the constitution of the mine from the cost-book to limited liability, under the Joint-stock Companies Act, without the consent of the whole of the shareholders?—A. SCROSCIA.

WIGAN MAIN AND ARLEY MINE COAL COMPANY.—In justice to the secretary of this company, I must inform you that I have received a note from him stating that he has been from home, and that he will write me fully the first opportunity. However, this much may be said, that the withdrawal of the name of Mr. Hall from the list of directors soon after the formation of the company, combined with the fact of the name of a respectable firm of solicitors having been made use of as solicitors to the company without their sanction, render it necessary that some information should be immediately forthcoming in the interests of all concerned.—R. NICHOLSON.

WIGAN AND ARLEY MAIN COAL MINE COMPANY.—Being a shareholder in this company, about which there appeared a query in the Journal of July 22, I was induced to correspond directly with the secretary, from whom receiving no reply, I addressed the solicitors, who informed me they would at once try and see the secretary, who some time since had promised to settle all claims of every kind. Desiring to enlighten my fellow-shareholder, you will perhaps be good enough to communicate the above information to him, and to some extent satisfy his anxiety.—R. N.

COMPRESSED AIR.—The Marquis Anatole de Caligny, of Versailles, did invent a machine for compressing air as early as 1846 (vide L'Institut, August 26, No. 660, p. 288). Signor Grandi, of Genoa, and Sommeiller were the first to apply the hydraulic ram (hitherto used only for raising water) to the compression of air. For Signor Grandi, see "Giornale dell'Ingegnere, Architetto, ed Agronomo." Milano: Anno VII., page 428, and plate 16.—D.: Paris.

GREAT DEVON AND BEDFORD (COLCHARTON) MINING COMPANY.—As a shareholder in this mine, I must ask, through the Journal, how it is that the half-yearly meeting, which must be held in July, according to the Articles of Association, is now "deferred for the present," because "they have nothing further to lay before the shareholders than what is contained in the report." The report referred to is one dated July 19, from William Skewis and James Richards; but I cannot agree with the directors that "everything is progressing satisfactorily." About two months ago the report was much better, and the percentage of copper something wonderful. There only remains 5s. per share to be called up, and then probably the Great Devon and Bedford (Colcharton), which was to be the wonder of the mining world, may pass into oblivion. "The directors," it is stated in their circular, "are very hopeful that before the annual meeting profitable returns will be made from the mine." I would simply ask, what have they seen to lead them to such expectations?—A. DEVONIAN.

BITUMINIZED PAPER PIPES.—"T. L. C." (Mold).—The company formed for developing Mr. Joliveau's invention for bituminized paper pipes is wound-up, the pipes having been found to be thoroughly useless in practice, though theoretically perfect. An attempt is now being made to introduce them into the United States, but whether under Mr. Joliveau's auspices or not we are not aware.

GLAMORGAN IRON AND COAL COMPANY.—I was glad to see by last week's Journal that someone has raised the important question as to the subscription for shares in this company, and I trust the directors will not hesitate in at once giving the information asked for. I wish to throw no doubt on the company or the directors, but it behoves all concerned in a public undertaking to seize the first opportunity of satisfying themselves as to the amount of responsibility they are incurring. Let us, then, by all means know the number of shares paid upon.—ANOTHER SHAREHOLDER.

GLAMORGAN IRON AND COAL COMPANY.—"Shareholder" (Manchester) wishes to be assured of the respectability of the proprietary of this company, as he seems to have been unfortunate in some previous speculations. I should not imagine that his speculative transactions can have been on a large scale, or he would have been better acquainted with business etiquette. An enquiry of that nature at all times tends to raise a suspicion that everything may not be above-board, and I am sorry to say that enquiries are only too frequently made for the very purpose of raising a doubt in the minds of timid holders. "Shareholder" should have had a little more "nose" about him than to rush into print as he has. He must indeed be a very clever man who can tell the social position of the various applicants for shares in any such company. "Shareholder" should be an exceedingly respectable person to arrogate to himself a conclusion that men of standing of the standing of the directors of the Glamorgan Company, and of the scientific position of those who have reported upon it, would lend their names to any misrepresentation of statistics such as set forth in the reports and prospectus. I trust "Shareholder" is sufficiently respectable to allow himself to be satisfied if they are all as good as he is. I think I might venture to say he need not fear upon such a score.—CRITIC.

THE METAL TRADE.—"P." (Bromley).—The pig-iron quotations are for g.m.b. If Gartsherr, Calder, Bismarck, or other particular brand be specially required, the broker through whom the business is done should be informed of the fact, and the price would be given accordingly. The cause of the difference in the quotations for the various kinds of tin is that the quality, purposes to which it is applicable, &c., are dissimilar. The special brand of bar-iron mentioned would be supplied by any broker to order.

GREAT EAST LOVELL, AND ITS MANAGEMENT.—This mine, which I believe is scarcely known to one-half of the mining world, is without doubt one of great promise and prospects. I am not alone in this opinion, but am borne out by many very eminent men well versed in the practical routine of mining. In it there are to be found some of the finest veins of tin, and the lodes are identical with those which have proved so rich in East Lovell, and pervade, in fact, the Lovell district. There are 8000 shares only, and on them 1s. per share is paid. The shares have been marketable, and readily negotiable at 2½, 4, at which price they were considered by men capable of forming a correct opinion to be cheap. Since that time they have gradually declined, and have now been for some time quite inactive at the nominal price of 2½, 2½. What is the reason of this? Is it not bad management? I have been a shareholder myself upwards of 15 months, and during the whole of that time have never received one single intimation of the progress, if any, or of what is going on. In fact, were it not for other available sources of information I should not know whether such a mine was in existence or not. It may seem impossible that a mine of good promise could exist for 15 months without a word being conveyed to the adventurers about its condition. I think if the shareholders were to follow the good example set them by the last East Lovell meeting, and appoint a committee of management to see that justice was done, they would be conferring a great benefit on themselves and on mining generally, by putting a stop to the slow, inert, and expensive mode in which such undertakings are sometimes carried on.—A SHAREHOLDER.—P.S. I have just (Aug. 1) received notice of a meeting on Aug. 8, when I hope this matter will be well ventilated. I see by the report of July 27 that the great steam engine is at last erected, and ready for work.

SHARE DEALING.—We never interfere in the sale or purchase of shares; neither do we recommend any particular mine for investment or speculation, or broker through whom business should be transacted. The addresses of most of the latter appear in our advertising columns.

THE MINING JOURNAL
Railway and Commercial Gazette.

LONDON, AUGUST 5, 1865.

We have now the returns from the Board of Trade for the six months ending June 30, which give an aggregate value of exports amounting to 74,128,688l., which, compared with the corresponding period of last year, when the declared value was 78,047,586l., shows a decrease of 3,918,898l.; but when put in juxtaposition with the result of the first six months of 1863, there is an increase of no less than 12,114,441l., the total up to that date being 62,014,197l. There is, consequently, no unfavourable deductions to be made as to the general prosperity of the country, from the fact that these returns for the first six months of 1865 being less than those of the first half-year of 1864. For the month of June the exports were 13,227,062l., against 13,978,526l. in June, 1864, and 11,271,527l. in June, 1863.

The result of shipments, in respect of articles identified with the mining industry of the country, show that their collective decrease represents only about one-fifth of the whole, after allowing for considerable increase in five out of the eleven heads into which this portion of England's exports is divided. The total, for the six months of this year, is 15,461,908l.; whereas for the same period of 1864 it was 16,169,088l., being a difference of 707,180l.; the increase in the five heads amounting to 748,742l., and the decrease in the six to 1,455,922l. The increase consisted of machinery, to the extent of 533,125l.; coals and culm, 114,779l.; copper, 60,907l.; hardware and cutlery, 29,966l.; and brass, 9,965l. The decrease comprised iron, to the extent of 981,267l.; steel, 189,778l.; lead, 166,972l.; tin-plates, 72,622l.; tin, unwrought, 23,223l.; zinc, 21,990l.

The interchange of the precious metals and bullion are, necessarily, in favour of this country for the six months. The imports amounted to 10,623,372l., while the exports were 6,496,826l., which gives a 4,126,546l. to our credit. The imports consisted of 7,191,362l. in gold, and 3,432,010l. in silver, while the exports were 3,530,255l. in gold, and 2,966,571l. in silver; so that the excess was 3,661,107l. in gold, and 465,439l. in silver. The principal import was from Mexico and South America, whence we received 4,231,728l., against only 128,393l. exported; the United States gave us 2,923,282l., against 18,215l.; Australia, 1,289,108l., against 35,059l.; Portugal, 532,884l., against 80,943l.; West Coast of Africa, 64,133l., against 26,432l.; British North America, 82,235l., against 60,378l.; Turkey, 740l., against 303l.; and "other countries," 97,665l., against 14,697l. To France we exported 2,184,197l., and received 691,463l.; to Egypt, 1,189,799l., against 257,549l.; to Holland, 1,057,979l., against 5948l.; to Belgium, 341,765l., against 128,188l.; to the Hanse Towns, 341,073l., against 11,393l.; to Spain, 700,036l., against 19,113l.; and to Brazil 317,567l., against 190,018l. From British possessions in South Africa we received 50,544l., and made no return in specie or bullion; and on similar terms we imported 36,690l. from Gibraltar, 8184l. from Russia, and 2612l. from Malta.

The general export trade for the six months employed 22,222 vessels, of

which 2487 were cleared for British possessions, and 19,735 for foreign countries. The total burthen of the former was 1,195,455 tons, and of the latter 4,672,453 tons; so that the average tonnage of each vessel was 480, in respect to those sent to British possessions, and 236 of those presented 4,228,235 tons; and 8488 were foreign, representing 1,604,673 tons. Of the foreign vessels, 2009 were French, representing 1,004,673 tons; 765 Dutch, 665 Hanoverian, 564 Prussian, 348 Hesse-Turnian, 188 Austrian, 158 United States, 128 Spanish, 102 Sardinian, 64 Portuguese, 64 Sicilian, 38 Greek, 59 "other European countries, and 13 other countries in America, Africa, and Asia."

THE MINERAL WEALTH OF THE UNITED KINGDOM.
By ROBERT HUNT, Esq., F.R.S., Keeper of Mining Records.

The hope was expressed, in the introduction to the Mineral Statistics for 1863, that the publication of these returns might be effected by Midsummer in future years. This has not been found possible, owing—and it is curious to note the operation of apparently a very remote cause—to the deficiency of rain in 1864. In many of our most important mines the want of water was so great, that the operations required for the preparation of the ores for the market were entirely suspended; the consequence being that large quantities of the minerals raised last year were not marketable until within the last few weeks. Under the circumstances, it is satisfactory to be able to issue the Mineral Statistics for 1864 about the same period as that on which those of the previous year were issued. This could not have been done but for the promptitude with which returns have been forwarded to the Mining Record Office from those Mines which have only recently completed the dressing of their ores.

GOLD.—Five mines in Merionethshire have been producing gold during 1864: 2336 tons of quartz have been crushed, and 2887 ounces of gold obtained, the value of which was 9991l. This is in excess of the quantity obtained in 1863, which was only 552 ounces; but it is considerably less than the production of 1862, when 5299 ounces were extracted, having the value of 20,390l.

TIN.—The tin ore (black tin) raised from the Cornish and Devonshire mines, and smelted last year, was 15,211 tons, a quantity but slightly in excess of the production of 1863, which amounted to 15,157 tons. The price of tin has been lower during 1864 than at any period during the last 12 years, consequently the money value of the ore fell below that of 1863, being 925,969l. 12s. 6d. as against 963,985l. 4s. Of metallic tin (white tin) this ore produced 10,108 tons, valued at 1,082,061l. 8s. The want of agreement between the smelters' returns and the Stannary returns will be explained by the details given. From these it will be seen that in some cases the dues have been paid to the Stannary Court for a part of the year only, consequently the total given in those returns falls very far short of the actual production of the two Western Counties. These remarks will equally apply to the other minerals and metals.

COPPER.—The copper mines of the United Kingdom produced 214,604 tons of ore, the value of which was 1,155,471l. 7s. 6d. This gave 13,802 tons 13 cwt. of metallic copper, valued at 1,350,699l. Upon referring to the returns for 1863, it will be seen that, although the quantity of ore raised from the mines was less, yet that the metallic copper smelted was in excess of that obtained in 1864. This shows that the average produce of the ores yielding this metal has declined.

LEAD.—During the year 1864 there has been an increase in the quantity of lead ore raised from our mines, 94,433 tons having been dressed, sold, and smelted, whereas in 1863 the production was only 91,283 tons of lead ore. The value of the ore raised in 1864 was 1,849,605l. 1s. The metal smelted from this ore amounted to 67,081 tons, of the value, as lead, of 1,448,959l.

SILVER.—The lead obtained from the ores of our mines gave 641,088 ounces of silver, with the exception of one very small parcel, returned as silver ores, and another mineral, obtained in Anglesea, known as "Blue Stone," a mixture of copper, zinc, lead, and silver. The quantity of silver, however, obtained from these was very trifling. Of the silver separated from the copper and zinc ores it has not been possible to obtain any return, and no reliable estimate can, at present, be made.

ZINC.—Of the ores of this metal our mines produced 15,047 tons 6 cwt., worth 44,562l. 13s. The metallic zinc obtained being 4040 tons, having a market value of 98,983l.

PYRITES.—SULPHUR ORES.—94,458 tons of sulphur ores of various kinds were produced in 1864, about a thousand tons less than the return of 1863, the value of these ores being 58,097l. 2s. 6d. The large quantities of these ores imported, amounting last year to 170,990 tons, greatly interfered with the value of pyrites to the British miner. The foreign ores are generally sold at a higher price, on account of the copper they contain.

MISCELLANEOUS MINERALS.—These comprehend manganese, of which we produced only 500 tons; arsenic, ochres, and oxide of iron (or goosene), wolfram, and barytes; the total value of these minerals returned being 5130l.

IRON.—The production of iron ore is still increasing, 10,064,890 tons 16 cwt. being consumed in our blast-furnaces in 1864, to produce 4,767,361 tons of pig-iron. The value of this iron ore is estimated at 3,867,144l., and the estimated value of the pig-iron produced was 11,919,877l.

COAL.—The rate of increase in the production of coal has been more rapid during the past than it was in the previous year. It has been discovered that the returns from one important district (South Staffordshire) have been much too low in previous years; therefore, that the former returns require correction. The cause of this has been fully explained in the proper place. This renders it necessary that the amended returns for the last four years should be given:—

1861	.....Tons	85,635,214
1862	.....	88,638,338
1863	.....	88,292,515
1864	.....	92,787,873

The value at the pit's mouth of this enormous quantity will be 23,197,988l.

The largest quantities were produced from the following coal fields:—
Durham and Northumberland.....Tons 23,248,367
Scotland.....12,400,000
Lancashire.....11,530,000
Staffordshire and Worcestershire.....11,459,850
South Wales and Monmouthshire.....10,976,600
Yorkshire.....8,809,600

It will be seen from the following summary that the total value of metallic and earthy minerals—exclusive of building stones and brick or common clays, limestone, and the like—was 31,604,047l. The metals obtained had a value of 16,281,869l., and if to this the coal be added it will give 39,479,837l. as the total value of the metals and coal produced in the United Kingdom in 1864.

GENERAL SUMMARY OF THE MINERALS AND METALS PRODUCED IN THE UNITED KINGDOM IN 1864.

Quantity of mineral raised.	Value of mineral raised.	Quantity of metal obtained.	Value of metal obtained.
Gold Quartz.....Tons	2,336 .. £ 2,336 ..	2,887 .. £ 9,991 ..	1,004,673 ..
Tin.....15,211 ..	925,969 ..	10,108 ..	1,082,061 ..
Copper.....214,604 ..	1,155,471 ..	13,802 ..	1,350,699 ..
Lead.....94,433 ..	1,849,605 ..	67,081 ..	1,448,959 ..
Silver.....51 ..	44,562 ..	641,088 ..	17,000 ..
Zinc.....15,047 ..	44,562 ..	4,040 ..	98,983 ..
Pyrites.....94,458 ..	58,097 ..	.....	.....
Miscellaneous Minerals.....	5,130 ..	.....	.....
Iron.....10,064,890 ..	3,867,144 ..	4,767,361 ..	11,919,877 ..
Coal sold and used.....92,787,873 ..	23,197,988 ..	.....	.....
Earthy minerals not included in the above, estimated ..	1,600,000 ..	.....	184,000 ..
Other metals, estimated.....	.....	.....	.....

Total value of the minerals produced ..£31,604,047

Total value of the metals obtained ..£16,281,869

* Nearly the whole of the metallic silver was obtained from the lead ore.

We shall give a very ample abstract of the Mineral Statistics included in the returns just issued in consecutive Journals, commencing next week.

MINING IN AUSTRALIA.—It appears from an official paper that the duty levied on gold in the nature of rent in New South Wales in 1863 was 29,502l.; 2144l. was derived from 50 leases for mining purposes other than gold, 1520l. from auriferous leases issued, 9719l. from miners' rights granted, and 1246l. from business licenses issued. The Governor of Queensland, in a speech proroguing the Colonial Legislature, Sept. 13, 1864, said, "Since the establishment of Queensland, in 1859, a promising commencement has been made towards the development of our mineral resources in gold and copper." In 1864 the colony of Victoria derived

To the west of Cat Hole, a small mine is working by the Trelogan party, called GLAN ALUN, in which a good shoot of lead ore has been in course of being opened out on for the last few months or so. A few weeks

ago a slide came across the vein, and temporarily cut out the ore; but the vein has again recovered itself, and is now almost as good as it was before it was intersected by the slide. The present end is, I understand, about 200 yards from Cat Hole boundary, so that the Glean Alan Company have an ample scope yet in this direction.

About a mile south of the Cat Hole and Gwern-y-Mynydd run, we come to Maes-y-Safn, a mine which was formerly worked, with considerable success, by a local party—the Messrs. Lewis—but which, on the expiration of Messrs. Lewis's lease, about four years ago, was offered by the Marquis of Westminster to Messrs. Taylor, who have since worked it. Pending the putting up of a new engine, which is now in course of erection, the development of the bottom of this mine, where there is a very rich and regular pipe of ore, is partially in abeyance. Between this and Minera there is no profitable mine, I believe, working at present.

REPORT FROM NORTHUMBERLAND AND DURHAM.

AUG. 3.—The Coal and Iron Trades here are good, the stocks of both being small; the vend of steam coals from Northumberland is at present very large, most of the collieries being at full work, and doing their utmost. The strike at the Cramlington and Shank House Collieries still continues, with little prospect of terminating. It is, indeed, a complete "lock-out," as the owners are assisted and indemnified for any loss by the Steam Coal Association, and the men are upheld by their Union; so that if both parties are properly supported by their backers the strike may continue for an indefinite period. It is, therefore, much to be regretted that such a strike should have occurred; and, after all, the dispute does not appear to have any grave question involved in it, as the whole amount asked by the men as an advance is 3d. per day. It is to be hoped that some means will shortly be devised to put an end to the strike, as it is a serious matter for the Miners' Union to saddle themselves with the support of 500 men and boys, and also for the Coalowners to burden themselves with heavy expenses, with no advantage to expect for either party. The stocks of pig-iron held in the Cleveland district at the end of the half-year—that is, June 30—was less by 12,000 tons than that held the half-year preceding. The make is still rapidly increasing, and before the end of the present half-year a considerable number of additional furnaces will be in blast. A very large quantity of iron ore has been worked lately to meet the demand for the new furnaces. The prices quoted by the Ironmasters' Association are—No. 1, 53s.; No. 2, 52s.; No. 3, 50s.; No. 4 and mottled, 48s., &c. On the whole, the Coal and Iron Trades in the North are in a most healthy and prosperous state, and the prospect for the autumn and winter is most encouraging, as stocks of all kinds are low, and a brisk demand, with good prices, may be expected for all the staples of the district. The Tyne Coal Company are proceeding vigorously with their important operations, but we have nothing new to report respecting these works Deep sinking at the Felling Colliery still proceeds, and a depth of about 35 fathoms, or 70 yards, has now been reached below the Low Main seam. One coal seam has been passed through 2 ft. 6 in. in thickness, but a better seam is expected shortly. This is, we believe, the first sinking that has been made below the Low Main seam in the Lower Tyne district, and its success will be most important to the whole district.

REPORT FROM NORTH AND SOUTH STAFFORDSHIRE.

AUG. 3.—There is a degree of improvement in the demand for Finished Iron, both for home consumption and for export. Prices are firm, and stocks are low, and any decided recovery of the general trade of the country would, probably, soon give an impulse to the demand for iron. On the whole, the trade may be reported as improving, and its prospects brighter. The revival of the American demand would soon make the iron trade brisk. The Hardware Trades share the improvement which has been manifested in the iron trade. For the last three months the orders received by the merchants and factors have been reduced to a very small amount, but within the last week or fortnight a decided reaction has set in. At present the orders are of small amount, and a long sheet only makes a small total; but there is a very distinct recovery, which, it is hoped, may be regarded as the turn of the tide. The West India and South American orders are improving, and the Australian orders are tolerably good, but the East India trade is completely paralysed. There are also signs of a recovery in the trade with the North American States, and the Canadian orders are coming in fairly. The nailers have been on strike, but have resumed work on their demands having been acceded to. The glass-cutters are on strike at a number of works in Dudley and Stourbridge and the intervening neighbourhood. The cause of this suspension of works is that a Mr. Long, who takes out work for a number of masters, employs a greater number of apprentices than the men approve of, and the strike is against every master who lets out work to Mr. Long.

Messrs. Carpenter and Tildesley, lock and curry-comb manufacturers, of Willenhall, near Wolverhampton, have obtained a first-class certificate for locks and curry-combs, at the Exhibition at Dunedin, in New Zealand. In the case of over-winding at Pelsall, noticed last week, the engine-man, Benton, has been committed for trial on the charge of manslaughter, both by the coroner and the magistrates. It was stated before the magistrates that when the accident occurred the prisoner had been in charge of the engine for twenty-four hours without cessation. There can be no wonder at the occurrence of accidents with such a strain upon human endurance. It was also given in evidence that three skippers, not containing men, had recently been drawn over the pulley. The magistrates, whilst fully compelled to commit Benton, expressed sympathy for him, and he was admitted to bail.

An important case under the Mines Inspection Act came before the stipendiary magistrate, Mr. T. Spooner, at Wolverhampton, on Wednesday last. Mr. Martin Baldwin, proprietor of the Wallbuts Colliery, near Bilston, was summoned by Mr. Baker, Inspector of Mines, for having neglected properly to secure the mouths of eight pit-shafts, which had ceased to be used. Mr. Baker visited the colliery on the 24th of June, and found eight shafts either improperly fenced or without any fencing at all. He gave notice of their state to Mr. Baldwin, and on visiting the colliery in a month found that all had been fenced but two. Mr. Pugh, Mr. Baldwin's manager, said that they kept five men, whose sole duty it was to see that the pit-shafts were properly protected, but the children of the locality were so destructive that it was impossible to keep the fences good. Mr. Spooner said the fences must be maintained, and fined the defendant for different pits a total of 30l. and costs.

The reports of the directors of a number of local trading companies have been issued, and they are almost all favourable. The Birmingham Joint-Stock Banking Company, which was the first limited banking company established, after being in existence for three years and a half, pays a dividend at the rate of 20 per cent., and has a guarantee fund of 150,000l., which is invested in Government securities or railway debentures. The deposit and current accounts amount to nearly a million. This company took to Attwoods and Spooner's Bank, paying the shareholders 11s. 3d. in 1l. The Midland Wagon Company pays a dividend at the rate of 15 per cent.

REPORT FROM DERBYSHIRE, YORKSHIRE, AND LANCASHIRE.

AUG. 3.—The Iron Trade, though not active, is steady, and prices are well maintained, particularly for the best brands of manufactured iron. There is an absence of speculation, and merchants appear to be purchasing to meet immediate requirements. Railway iron is in good request, and plates for shipbuilding are better enquired for. There has been an improvement in the Cleveland iron trade, and manufacturers are keeping their works on full time. The demand for shipments is brisk, and the local trade has also much improved. The Indian markets are taking large supplies of Yorkshire iron for railways. At length the new branch of the Midland Railway, which is to form a direct communication with Sheffield, has been begun, and shafts are being sunk for a tunnel in the neighbourhood of Norton. A considerable tract of mineral ground in the vicinity of the line has changed hands since the Bill was obtained, and as soon as the line is commenced one or two large works will be commenced under the limited liability principle. The new works of Messrs. Fry, Janson, and Co., of Darlington, are nearly completed, and in a few weeks they will be in full working operation.

The Coal Trade is improving throughout these counties, and a better enquiry for hard and house coals has been made for the London markets. The export trade has also improved. The coke trade is also brisk, and, though the use of coke has been almost abandoned in locomotives, the enquiry still keeps brisk.

A meeting of miners' delegates attached to "lodges" in Lancashire and Yorkshire was held near Ashton, on Tuesday, when it was resolved to de-

mand an advance of 2d. in 1s. on the present rate of wages. It was stated that a large number of the colliery owners had expressed themselves in favour of a rise. The demand will be presented on the 18th inst., and an aggregate meeting of colliers will be held at Hollingworth Lake on the 19th. It is expected that 20,000 men will be present.

Of the Derbyshire lead mines nothing is doing of any importance, except at Mill Dam, and last Saturday some large specimens of ore from the mine were exhibited in one of the windows of a Sheffield newspaper. This is making too much of a show. If the shareholders have such a good thing they will not be so desirous to publish it to the world.

The local stock markets have been dull, and prices generally lower.

REPORT FROM MONMOUTH AND SOUTH WALES.

AUG. 3.—The staple trades of the district show an average degree of vitality, and at both the iron and coal works there is ample employment for all the hands that can be procured. Ironmasters complain more of the scarcity of men than of orders, and, in fact, the demand for many descriptions of iron is such that the requirements of buyers cannot be supplied as soon as desired. This is to be attributed, in a great measure, to the reduced make and the shortness of hands, for if men were plentiful, and the weather not so oppressively hot, the demand could be met without difficulty. Fortunately, the temperature has been a little cooler during the last few days, and the puddlers are able to stand the fire for a longer time. In tin-plates the same state of things prevails as reported last week, and very few sales have been effected, owing to the determination of makers to hold out for the full advance. The steam coal proprietors are fairly off for orders, and they are doing an increased export business; still there is no great activity evinced. House coal commands a moderate coasting sale, but the home demand is so limited that many of the collieries are on short time. Coke for ironwork purposes is in fair request, and the patent fuel shipments to foreign markets are considerable.

A company has been formed for the purchase of the Llanharri mineral estate from Mr. John Bethell, the brother of Lord Westbury. Mr. Bethell has expended a large capital in developing the property, and several seams of coal and deposits of iron ore have already been discovered; and, as a proof of his confidence in the value of the property, Mr. Bethell has agreed to take four-fifths of the purchase-money in shares.

A cargo of iron ore from Bona, Algeria, has just been imported at Newport, being the first cargo ever brought to South Wales from that country. The result of the trial of the ore will be duly recorded in the Mining Journal.

A public dinner was given to the directors of the Alexandra (Newport) Dock, at the King's Head, Newport, on Thursday.—Lord Tredegar, Mr. Crawshaw Bailey, M.P., Mr. Thomas Brown, Mr. John Lawrence, Mr. James Brown, Mr. G. W. Jones, Mr. William Williams, Mr. Gratex, Mr. Rhodes, Mr. Alexander Bassett, C.E., and many other gentlemen connected with the iron and coal trades of the district were present. Mr. Crawshaw Bailey stated in the course of some remarks which he made that he had had an application to sink to the lower measures on his property at Aberbeeg, and the quantity of unworked coal in Monmouthshire was no less than two thousand eight hundred million tons. Mr. Thos. Brown, in returning thanks as one of the directors of the new dock, said he believed both the old and new docks would ultimately be profitable undertakings. Although he had left Ebbw Vale four years ago, he had again become connected with these extensive works, as well as with another coal property in the county, of about 1500 acres. He referred to the almost unlimited resources of the district for the production of coal and iron, and he remarked that he had discovered a valuable shale on Mr. Bailey's property, near Blaiva, which was abundant in paraffin. Lord Tredegar has subscribed 150,000l. to the new docks, the Great Western Company have powers to subscribe 50,000l., the Brecon and Merthyr Company 50,000l., and the Monmouthshire Company 20,000l., making a total of 270,000l. The authorised capital is 600,000l., and the balance of 330,000l. will, no doubt, be readily subscribed by the public.

The Llanelly Railway Company half-yearly meeting was held at Radley's Hotel, on Thursday, Mr. Biddulph in the chair. The report stated that the earnings for the half-year ending June 30 amounted to 17,921l.; the working expenses, inclusive of the hire and purchase of waggons, 9261l., showing an increase of 1026l. in the receipts over the corresponding half-year, and of 645l. in the working expenses. The available balance was 8331l., to which was added 502l. brought forward from the previous half-year, making a total of 8853l. After payment of interest and rent of the Vale of Towy a surplus remained of 5258l., applicable as follows:—5 per cent. on the A preference stock and B preference shares, leaving for the ordinary stock 3393l., out of which a dividend was recommended at the rate of 3¼ per cent. per annum, leaving a balance of 192l. to be carried forward. The report was adopted, and the dividend declared, being 15s. per cent. more than for the corresponding half-year.

His Imperial Highness, Prince Napoleon, during his tour in South Wales, visited Messrs. Insole and Son's colliery, Rhondda Valley. The Prince made a minute examination of the workings, and he appeared to be greatly pleased with his visit. The Monmouthshire Iron and Coalmasters' School Association annual meeting was held at the Town Hall, Newport, on Monday. The Lord Bishop of Llandaff presided; 320 copies of prizes this year, and the examination stated that the children showed greater proficiency in the various branches of education than at any previous examination. The association is supported by the voluntary contributions of the iron and coalmasters, and others who take an interest in the progress of education among the mining population of the county.

THE TREDEGAR COLLIERY EXPLOSION.—VERDICT OF THE JURY.—Mr. J. Marsden, one of the jury at the recent inquest at Tredegar, has addressed a letter to the papers defending the conclusion arrived at by the jury. He asserts that the verdict was read over and explained to all the jury, that the coroner afterwards stated distinctly that it amounted to a verdict of manslaughter against Mr. Bevan, and that, having heard these explanations, 12 out of the 16 jurymen agreed to the verdict. As reported last week, 5 out of the 12 have since denied that they properly understood the effect of the verdict; but Mr. Marsden maintains that this was an afterthought, brought about by certain influences being brought to bear upon them; and, in fact, he goes as far as to state that a system of persecution was adopted by the Tredegar Company's chief officials, which cannot be too strongly condemned. Evidently the matter requires further investigation.

The arrivals at Swansea include—the Auguste, from Nantes, with 65 tons of iron ore, for Thompson; the Rapid, from Huelva, with 179 tons of copper ore, to order; the Sarah, from Newport, with 20 tons of iron ore, for Messrs. the James Black, from Lisbon, with 50 tons of silver ore, for Dillway; the Jacquesbot de Brest, from Cherbourg, with 112 tons of iron ore, for Crawshaw; the Hercules, from Caldera, with 520 tons of copper regulus, for H. Bath and Co.; the Avenir, from Dunkirk, with 90 tons of iron ore, for R. Cowell; the Victoria, from Rouen, with 60 tons of copper ore, for J. Stephens; the Norman, from Palermo, with 178 tons of copper ore and 171 tons of lead ore, for H. Bath and Co.; the Catherine, from Bilbao, with 150 tons of iron ore, for W. H. Tucker; the Melanie, from Bordeaux, with 140 tons of iron ore, for R. Cowell.

THE DUBLIN EXHIBITION.—No. I.

The employment of electricity as an agent for effecting the ignition of gunpowder has been for upwards of a century the subject of patient investigation, and Messrs. Siemens Brothers have now on view at the Exhibition an interesting machine which performs this operation, either by firing guns or exploding mines by means of electrical fuses. A few words on this important subject may be interesting. At first Franklin, and then Priestly, made some experiments in this direction, the result in each case having been favourable; but no real progress can be said to have been actually made until after the discovery of the galvanic battery, and the construction of Volta's pile. In 1832, galvanic electricity was applied to purposes of explosion by the French military engineers, and later on, some important blasting operations, were successfully performed by its agency, amongst which may be mentioned the destruction of the Round-down cliffs near Dover, and the operations on the wreck of the unfortunate "Royal George," &c. It need hardly be observed that the employment of galvanic currents for the ignition of gunpowder presents great advantages over the old system of slow fuses, but its application is, nevertheless, attended with some uncertainty, as well as a good deal of trouble in the maintenance of the battery, which defects are, however, not found to exist when frictional electricity is employed, the latter being, besides, the most commodious, as well as the surest in its action. In the apparatus used by the Baron von Ebner, in Austria—a specimen of which is also exhibited by Messrs. Siemens—the electricity is generated by the friction of two circular discs of vulcanite against leather cushions, upon which a surface of amalgam is spread; but a still more complete machine, giving double the effect, and being much less expensive, is that constructed by M. Bornhardt, and which is the one first alluded to. It consists of a single plate of vulcanite, rubbed by a cushion of fur, by which arrangement important advantages are obtained. This description of machine is preferred in Germany to all other kinds, whereas in this country induction currents are mostly used. Professor Abels, moreover, who has done much to the solution of the problem, has constructed a fuse of sub-phosphide and sub-sulphide of copper with chlorate of potassa, which is found to be the most delicate and explosive. He explodes this mostly with the current of a magneto-electric machine, which he prefers to a frictional machine on account of its being less liable to derangement through dampness and other disturbing causes. It

may be properly observed, however, that whichever system is adopted, the benefits are inestimable, when compared with the old method of slow matches and regular burning fuses, saving, for instance, in a practical point of view, both time and labour, and frequently the lives of the workmen also; whilst Mr. Robert Mallet's experiments upon the transit velocity of earthquakes, made in the neighbourhood of quarries, and blasted by means of electrical fuses, have already proved how valuable the system is, if merely regarded from a scientific stand-point alone.

Another invention in the Exhibition, which is also worthy of particular notice, in a mining point of view, is Mr. F. N. Giabonne's plan of Mining Signals, by the use of which the engineer, bankman, and hanger-on are practically within easy speaking distance, saving thereby, for one thing, much time in the working of the mine. In the engine-room, an indicator is placed for the engineer, and both the bankman and hanger-on are each provided with a communicator and indicator, all of which instruments are connected by an electric cable, which is thoroughly protected from damage, and these, together with a small and simple galvanic battery, complete the apparatus. Communication between each of the parties alluded to can be instantaneously effected, and there is the further advantage that the attendant at the lower end of an incline is enabled to make use of the engine-power at the upper end to sort or weigh the trucks, he having perfect control of the engine. This apparatus is beginning to be highly approved of, and appears to be about the best adaptation of electricity to mine-signalling of any we know. In using it, however, care must be taken that the arrangements are made by competent engineers, as when this is not done the risk of accident may be fearful, and certainly the India-rubber, Gutta-percha, and Telegraph Works Company, who have undertaken the manufacture of this important apparatus, deserve much praise for their endeavours to bring the thing to perfection.

MANUFACTURE OF COMPRESSED PEAT FUEL.

At the meeting of the Institution of Mechanical Engineers at Dublin, a very interesting paper, by Mr. C. Hodson, of Portlanning, was read on Wednesday. Improvements in the ordinary mode of preparing peat fuel have attracted much attention for many years. The chief difficulty lay in drying the wet turf taken from the bog. A system which had in it all the elements of success was proposed by Groyneil and others about fifteen years ago. Their idea was to cut turf in the ordinary way, and to air dry it to the extent possible during the summer; then to grind it and complete its desiccation whilst in a state of powder, and subsequently to compress it in a machine provided with a reciprocating ram, and several moulds capable of being brought successively under the ram. A beautiful sample of hard fuel was thus obtained; but the quantity made was limited to samples, the machine being complicated. The practical difficulties which beset all early attempts in the manufacture of peat into fuel have now, however, been overcome by the system of machinery now employed at the Derrylea Peat Works. The system in use at these works is based on the principle that the drying of the peat is the main difficulty of the manufacture, and this is accomplished by operating continually on the surfaces of disintegrated peat instead of on compact sods or blocks, and then using compression only as a means to render the already prepared peat transportable and marketable. The plan of obtaining the peat from the bog by successive harrowings and scrapings forms also a part of this system of drying by their surfaces.

With regard to the apparatus used at the works, they consist of a railway formed of 36lb. rails, well fitted at the joints, running along the centre of the drained piece of bog. It is laid on sleepers of native timber, and carries an eight ton locomotive. On these rails run a six-wheeled truck, across which, and reaching the entire width of the drained grounds, lies a square box lattice girder, which is formed of half inch iron at the corners of each of the four latticed sides, being one and a half inch by ½ inch iron, with two feet spaces. It is six feet square at the centre where it rests on the wagon, and tapers to one foot square at each end, and is assisted perpendicularly and laterally by wire rope stays set in taut. This apparatus is propelled by the locomotive at the rate of about four miles an hour, with its great arms stretching over the bog at each side to the distance of nearly 150 feet and to it are attached ten harrows, each six feet square, which, by repeatedly passing over the ground, scarify it, and pulverise the surface to a depth of from one to two inches. The operation is performed during any moderately fine weather in the mornings and during the day. The light-powdered surface, which readily dries to a certain extent, is wheeled to the road by men and waggons into the works for manufacture. In dry weather the upper surface of the bog, thoroughly drained as it is, will always contain much less water, perhaps less than half what the general mass retains, and as by this mode of operation a fresh upper surface is being daily exposed, it follows that peat in the most favourable state for drying is being constantly operated on. As soon as the harrowing begins rapid drying takes place, and a very large portion of the water which is not removed by drainage is evaporated by a few hours' exposure. The mull, when waggoned into the factory, is generally found to consist of about 40 per cent. peat, and 60 per cent. water. Bog in its natural state consists of 90 parts water, and 10 peat. When drained as described, after some hours of an average dry day, it consists of 60 parts water and 40 parts peat. At Derrylea, the only artificial heat used is that obtained from the waste steam of the compressing engines, and the smoke and gases of the boiler fires. These are applied to heat very extensive surfaces formed of sheet iron, on which is spread a thin layer of peat fuel, kept in continual and progressive motion by machinery. The drying kiln consists of brick buildings 500 feet long by 34 feet wide, having an upper and an under floor of ½ inch sheet iron extending the entire length. The buildings are of brick, roofed with tiles. Under the lower floor, which is placed about two feet from the ground, is blown the smoke and waste heat from the boilers, and instead of the ordinary chimney a large fan is used to urge the fire and force the products of combustion under this sheet-iron table. The upper floor is carried on cast iron girders, and stands four feet high above the lower one. It is made double, with a distance between the sheets of about four inches, for the purpose of being heated by waste steam from the compressing steam engine. By the time the whole of the 60 per cent. of water is evaporated an arrangement of bands and elevators conveys the peat to a loft over the compressing machine, where it is subjected to the action of an apparatus, the result of which is to pass the peat down a tube by the action of a ram. As the peat is driven forward in the tube it becomes so wedged, and so powerful a resistance is offered by the friction against the sides of the tube, that each successive charge is consolidated into a separate hard block before the whole mass in the tube yields. The outer end of the tube is entirely open, the compressed peat is delivered from it in a continuous cylindrical bar, which can be readily broken up into separate discs of one inch thickness each, which are formed at each stroke of the saw. Each block in transit remains one minute under pressure, and the quality of the compressed peat as fuel is further improved by its being made to pass along an open chute continued from the end of the tube some 300 feet from the machine to the store or wagon, without rupturing the continuous cylindrical bar in which the peat issues from the machine. Peat thus prepared is, it is claimed, thoroughly freed from moisture, and well adapted for the boilers of stationary engines, and for brewers' work, and has found a ready sale for household purposes, its great cleanliness and freedom from smoke being a strong recommendation. A very good gas is made by using one-third of Cannel coal and two-thirds of this compressed peat, but probably from its application to the manufacture of iron the most useful results will yet be derived. [An abstract of the important discussion which followed the reading of the paper will be given in next week's Journal.]

BLAST-FURNACES.—Mr. C. Attwood, of Tow Law Ironworks, has patented the use of condensing-chambers at the top of blast-furnaces to condense and cover the zinc contained in the iron ore, and which would otherwise be blown from the tunnel-head, and lost in the surrounding atmosphere.

PROPELLING TRAINS ON RAILWAYS.—Mr. Thomas Moy, of Clifton's Inn, mechanical draftsman, provisionally specified an invention which has for its object the propulsion of trains on railways by means of the mutual action and reaction of

wholes or rollers, and rails or bars, with undulating surfaces consisting of a series of irregular curves formed on the wave-line principle.

THE COAL TRADE.

SUMMARY OF COAL PRODUCE OF THE UNITED KINGDOM FOR 1864.

Durham and Northumberland.....	Tons 23,248,367
Cumberland.....	1,880,795
Yorkshire.....	8,809,600
Derbyshire.....	4,470,750
Nottinghamshire.....	796,700
Leicestershire.....	890,500
Warwickshire.....	754,000
Staffordshire and Worcestershire.....	11,459,851
Lancashire.....	11,530,000
Cheshire.....	822,750
Shropshire.....	1,150,000
Gloucestershire, Somersetshire, and Devonshire.....	1,950,000
Monmouthshire.....	4,028,500
South Wales.....	6,948,000
North Wales.....	1,987,060
Scotland.....	12,400,000
Ireland.....	125,000

Total produce of the United Kingdom 92,787,873

TABLE SHOWING THE INCREASE IN NUMBER OF COLLIERIES SINCE 1853.

Counties.	1853.	1864.
Durham and Northumberland.....	225	289
Cumberland.....	23	30
Yorkshire.....	30	39
Derbyshire.....	333	379
Nottinghamshire.....	276	422
Leicestershire.....	123	184
Warwickshire.....	11	19
Staffordshire and Worcestershire.....	15	21
Lancashire.....	123	117
Cheshire.....	393	523
Shropshire.....	48	66
Gloucestershire and Somersetshire.....	85	131
Monmouthshire.....	2	2
South Wales.....	19	20
North Wales.....	41	216
Carmarthenshire.....	41	102
Glamorganshire.....	186	103
Glamorganshire and Monmouthshire.....	30	41
Flintshire.....	25	35
Denbighshire.....	5	5
Anglesea.....	163	202
Llanartha.....	78	101
Ayrshire.....	34	49
Fife.....	8	8
Clackmannan.....	11	14
Haddingtonshire.....	15	16
Edinburghshire.....	15	16
Linlithgowshire.....	34	48
Perthshire.....	11	17
Stirlingshire.....	11	17
Dumfriesshire.....	13	22
Other counties.....	19	73
Total.....	3397	3268

THE AMERICAN IRON TRADE OF THE FUTURE.

The proper development of the Iron industry of the United States demands a steady and abundant supply of first-class charcoal metal suitable for working into car wheels, boiler-plate, &c., and for the vast present and prospective requirements of the steel-maker in the departments of cast steel, puddled steel, and, above all, for use in the Bessemer or Pneumatic converter. The relative quantity of charcoal to mineral coal iron produced in the United States has decreased with the increasing production of the vast anthracite furnaces of Eastern Pennsylvania, and with the discovery of pure bituminous coal in Ohio, while scores of charcoal furnaces, scattered through the Eastern States, have gone out of blast through the appreciation in the value of timber lands, caused by the demand that has sprung up for fuel for other purposes, through the building of ways of internal communication and the demand for surface for agricultural use. These causes are year by year making the Eastern States less suitable for a large charcoal-iron production. Where, therefore, are our manufacturers in the early future to look for their supply of this necessary raw material? England sends to Sweden, Norway, Russia, and Nova Scotia for her best brands.

If we follow around the same northern isothermal zone, in which these countries are located, we reach upon our great lakes a region designated by nature in the most extraordinary manner as our future domestic source of vast amount of excellent charcoal iron. The belt of country along the southern shore of Lake Superior, extending 40 to 60 miles into the States of Michigan and Wisconsin, is one of the richest mineral regions on the globe. A district producing copper on the North already sends to market annually some 16,000 tons of the metal—a region producing, with argilliferous galena and sulphide of copper, silver and gold, is in process of development southward of this copper belt; while from Lake Monistique, in Schoolcraft County, to a point as far west as the Penokee iron range, 100 miles west of Ontonagon, are found immense deposits of iron ore of all varieties common in igneous rocks, magnetic oxide, red hematite, brown hematite, as well as the water-formed bog ore. One-eighth of all the iron made in the entire United States is dug from the mines of Marquette County, and yet ten years ago a piece of Lake Superior iron was a curiosity to most of our practical metallurgists. With the completion of the Sault Ste. Marie Canal, which was opened ten years ago this month, the projects for developing the iron ore trade assumed a definite shape. The few tons of mineral that had been carted around the portage at the mouth of the lake had proven its value, and the first year saw 1445 tons sent away for smelting.

The enlargement of the trade has since been steady and rapid, until in 1864 there were exported 235,123 tons, making a total of 834,534 tons, which would represent upwards of 500,000 tons of cast-iron. The development of the manufacture of pig from charcoal, in the county of Marquette, has been even more remarkable, as the difficulties to be encountered in building large structures, erecting new machinery, and collecting necessary labour in a distant and hyperborean region are numerous and serious.

The earliest iron made was produced directly from the ore in what is known as the Catalan Forge. This manufacture was commenced in 1847, by Everett and Jackson, at the Jackson Forge. After it followed the Marquette Forge, then the Collinsville Forge, and lastly the Forestville Forge, all in the same vicinity, near Marquette. They made iron with more or less success for a few years, but are now in ruins, or so greatly dilapidated that much time would be required to repair them. The production of pig-iron from charcoal commenced at the Pioneer Works, near the Jackson Mine, 1858; 1627 tons were sent to market that year. This manufacture has increased by the erection of new furnaces, until at present the Pioneer, the Collinsville, the Forestville, the Morgan, the Northern, and the Greenwood Furnaces are in activity.

In the manufacture of pig-iron we find in Marquette county the metallurgical traditions and customs of New England predominating. The iron-workers have migrated westward as nearly as possible on the line of their own parallel of latitude. Pennsylvania has comparatively few representatives either among those who furnish capital or those who furnish skill. The furnaces are all charcoal, driven in some cases by water, which is abundant, and can be used during the severest winter—and in some cases by steam—taking the gas from the furnace for fuel. The blast is driven in at 2 lb. pressure per square inch, and at a temperature of 620° Fahr. The charcoal is made almost entirely in kilns 25 to 30 ft. in diameter, and 25 to 30 ft. high, shaped like a straw bee-hive, and capable of burning 30 or 40 cords in 17 days; 20 to 25 of these kilns are required for each furnace, and they are scattered through the forest in the neighbourhood of the heavy timber.

Maple and birch, with some hemlock, are the woods charred—2½ cords are found to produce 100 bushels. Charcoal is now being delivered at the furnace at 11c. per bushel, by contract. The flux used is a limestone found near the railroad, and which does not cost over 35c. per ton of iron. The ore produces from 55 to 65 per cent., a soft hematite from the Jackson Mine being the favourite mineral of all the smelters. It requires 125 bushels of charcoal to reduce 1 ton of iron, and the furnaces produce from 10 to 18 tons in 24 hours. The cost of making iron is now about \$30 per ton, but it is asserted that under the most favourable circumstances iron has been made at \$14 per ton; and contracts have been entered upon for its manufacture by furnace owners with their managers at \$16 50c. per

ton delivered on board at Marquette. The foregoing facts will enable anyone familiar with the iron business to judge the relative advantages of the region under discussion as a locality for the production of pig-iron.

The future of the manufacture is encouraging, and in case the internal revenue taxes, joined with an inadequate tariff, do not force the business across the Atlantic, it will develop even more rapidly in the future than in the past. Land, from which may be cut an average of 50 cords of wood per acre, may be bought at from \$2-50 to \$4 per acre in hundreds of places along the shore of the lakes. There are already two competing lines of railway leading from the mines to the lakes. The lakes are free to all navigators who may desire to carry ore, and in five years there will be from twelve to fifteen mining companies competing for the market. This combination of circumstances will secure the delivery of ores at any point on the shore of the lakes that may be selected, at rates most advantageous to the manufacturer, while the various increasing uses for charcoal-iron will always cause an ample demand for the product of his furnace.

The iron trade is now oppressed by such a combination of imposts on metal of foreign and domestic production that the future seems gloomy enough for every one connected with the business; but if we could hope from our Government for one-half the care and protection given by England to her manufactures of iron and steel, during a period one-half as long as was necessary to develop her works properly, results of an extraordinary character would ensue. A careful study of the vast natural resources of Michigan, Wisconsin, Missouri, Indiana, Ohio and Pennsylvania, and a comparison with the iron-making facilities of Great Britain, show that we would be able to supply our home consumption at rates unprecedentedly low, and at the same time sell our iron and our steel in all the markets of the world—even to the artisans of Birmingham, Wolverhampton, and Sheffield.

ROBERT H. LAMBORN,
Secretary of American Iron and Steel Association.

VENTILATING MACHINES AND FURNACES.

The methods of ventilating the workings of mines fall primarily into two classes, those in which mechanical agents are employed, and those where heat alone is used for setting up a current. The former class is again divisible into machines used for compressing and those for exhausting the air, the latter kind being employed almost to the exclusion of the former. In furnace ventilation, of course, the action is always an exhausting one. In the newly-invented coal-cutting machines, compressed air of from 2½ to 3 atmospheres pressure is employed as the driving power; this may prove a great incidental advantage to the process, as the air escaping from the cylinder will aid the ventilation, and will also serve to cool the workings by the absorption of heat consequent on its expansion. The use of mechanical ventilators is, in England, generally confined to supplying fresh air to a single level, the whole of the workings of a large mine being but rarely dependent upon a machine for a constant circulation; they are, however, more used in the collieries of the North of France and Belgium, where pneumatic engines of considerable size and power are commonly seen. The great ventilating agent employed in English collieries is the underground furnace, which can be made sufficiently large for the requirements of the most extended workings. Permanent furnaces at the top of the upcast pits were formerly employed to a certain extent, but are now rarely seen.

AIR PUMP OF THE HARZ (HARZER WETTER SATZ).—This contrivance is employed in Cornwall and in the German mines for ventilating the ends of levels, and other places where the air is stagnant, by exhaustion; as it is usually of but small size, and requiring little power, it is generally attached to the rod of the pumping engine. It consists of a wooden box of a square section, open below and closed at the top, attached by a wrought-iron rod to a cross arm projecting at right angles from the main pump rod, by which it is moved up and down in an outer case of a similar shape partly filled with water. A pipe in communication with the level to be ventilated passes up through the bottom of the outer box to within a short distance of the top. It is covered with a plain clack or valve, opening outwards; two similar valves are fixed to the top cover of the inner box. As the rod ascends, a partial vacuum is established within the box, as communication with the outer air is prevented by the water-joint, and the top valves are kept closed by the pressure of the external air; the valve on the pipe inside therefore opens, and the air from the workings flows in until the change of stroke, when, by the descent of the box, the air is compressed and opens the two top valves, through which it passes freely into the atmosphere.—The same principle has been applied in Belgium to the construction of large ventilating machines for collieries. At Marihay, near Liege, a pair of wrought-iron bells or cylinders are employed, each of 144 inches diameter and about 9 feet stroke; they are suspended by chains over guide-rollers, and are driven by a direct-acting horizontal steam engine. There are 16 suction, and an equal number of exhaust valves, which, owing to the small difference of pressure produced, require to be counterbalanced with weights, in order that they may open and shut freely at the change of the stroke. The amount of air drawn by this machine is about 11,500 cubic feet per minute.

VENTILATING FAN USED IN THE SAXON MINES.—This fan is of the same kind of construction as that employed for blowing iron-founders' cupolas. It has five radial arms, with flat rectangular blades, which revolve about a horizontal axis within a cylindrical case or drum, having a circular aperture about 20 inches in diameter in the centre of each of the sides; the outside diameter of the fan is about 4 feet. The air taken in at the centre is discharged through a rectangular tube of 15 inches in breadth and 10 inches in height at the bottom of the drum, and is conveyed through pipes of a similar section, made of wooden planks or sheet zinc, into the forward end of the level to be ventilated. The fan is driven by a wheel 64 inches in diameter, connected by a strap with a spindle of four inches, giving 16 revolutions of the blades for one of the driving wheel. The strap is kept at a proper tension by a friction roller, attached to a board, which slides on a pair of horizontal cross timbers, an arrangement which allows the machine to be put out of work without stopping the driving wheel or disconnecting the strap in cases where it is only required to be used intermittently. By putting the central apertures in communication with the air tubes the fan can be used for establishing a circulation by exhausting the bad air. By surrounding the fan with spiral guide-plates or diffusers, the air, instead of being discharged at a useless velocity against the walls of the drum, may be led off to the discharge pipe more conveniently and economically.—Small ventilators on this principle, constructed by M. Schwamkrug, are now used in the Saxon mines; they have six arms, with blades 8½ inches square and 30 inches in diameter, and can be worked by one man at a maximum speed of from 400 to 450 revolutions per minute, with a pipe of 6 inches square; 60 cubic feet of air can be drawn in that time from a distance not exceeding a quarter of a mile. The quantity of fresh air required by a man at work in the end of a level is estimated at six cubic feet per minute.

FABRY'S VENTILATOR, OR PNEUMATIC WHEEL.—This machine is employed to a considerable extent in the Belgian collieries. It consists of two fans, each having three broad rectangular blades, arranged radially and at equal distances apart, around a horizontal axis, connected together by spur gearing wheels, so as to revolve at equal velocities in opposite directions. The fans are hung in a chamber of masonry, which covers about two-thirds of their circumference, the remaining parts moving in the open air. The chamber is rectangular in plan, with vertical side walls; the end walls are segments of horizontal cylinders, whose centre lines coincide with the axes of the fans. These cylindrical walls correspond to the drum in the ordinary fan blower; they are coated with cement dressed up to a smooth face, so as to give the smallest possible interval between the ends of the blades, without actually touching. The foul air from the mine is brought in through an arched passage in one of the side walls. The space intermediate between the two axes is kept isolated from the external air by a peculiar contrivance; each of the blades has a shorter blade projecting from either face at right angles, which carries a plate curved to an epicycloidal form; these cross arms are fixed at about two-thirds of the distance from the centre of the blades towards the circumference. As the two fans turn towards each other on the inner side (between the axes), a pair of the curved heads, one on each wheel, are continually in contact, preventing any communication between the interior of the chamber and the outer atmosphere. The blades,

as they rise, scoop up a quantity of air and deliver it at the outer edges of the chamber, the volume included between two contiguous blades being somewhat less than that contained in a segment of 120° of the cylinder bounded by the curved wall. A quantity of air is, however, carried in by the cross arms from without; this is in form an irregular five-sided prism, whose bases are enclosed by those parts of two of the blades that lie between the centre and the intersection of the cross arms, the cross pieces on one side of these blades and the cross arms on the intermediate blade of the opposite fan. The volume of this prism is, however, but little greater than that of a cylinder whose radius is equal to the length of the blade between the centre of the axis and the intersection of the cross arms with the blades of the fan. The effective volume removed by each fan per revolution, therefore, is nearly equal to that of a hollow cylinder whose longer radius is equal to the length of the blade, the smaller one being the point of intersection of the cross arms. These machines are usually made with arms 46 to 48 inches long, and about 115 to 120 inches broad. The effective volume removed per minute is equal to rather more than 25,000 cubic feet, at a pressure of from 1½ to 2 inches of water, the wheels making from 36 to 40 revolutions during that time; this requires a disposable effect of 14 steam horse-power, about one-half of which represents the useful mechanical effect.

VENTILATING FURNACE AT HETTON COLLIERY, DURHAM.—This is a furnace of the largest class, and it is so arranged that the amount of grate surface at work may be varied according to the necessities of ventilation. It stands in a rectangular chamber, opened in the solid coal and lined with brickwork, having a flat segmental vaulted roof. The fire-grate is level; it measures 25 feet in length, by 5 feet breadth on the bars, giving a total surface of 125 square feet. There are four pairs of feeding doors in the front longitudinal wall arranged like those of the furnaces of a marine steam boiler; other doors are placed above these for drawing air above the fire. The top of the furnace is arched in firebrick; the hinder wall is placed within two feet of the wall of the enclosing gallery; on the firing side there is a clear space of seven feet for the stokers, in addition to which there are two rectangular recesses for storing coals in the wall of the chamber, which are four feet square. The upcast shaft is circular in plan, measuring nine feet in diameter, and is lined with firebrick. There are two furnaces in connexion with this pit, producing a draught of 104,000 cubic feet of air per minute at a pressure of 1 inch of water.

FOREIGN MINING AND METALLURGY.

The foreign copper markets have not displayed much more animation than has prevailed on them of late. There has been scarcely anything doing either at Paris or at the Havre; on this latter market Chilean has been completely neglected. At Antwerp, Amsterdam, and Rotterdam no other purchases have been made than those necessitated by consumption. At Hamburg the article is very little sought after, notwithstanding the low prices. At Berlin, Cologne, and Stettin the article has experienced no change in price; the article has not been very active. The advances from the Dutch market are a little better; during the last few days the market has slightly revived, and about 5000 blocks of Banca tin have found purchasers at 55½ fl., and 1200 blocks at 55¼ fl. Holders stand out for 56 fl. There have also been some purchases of Billiton tin; various lots, amounting together to 2654 blocks, have been dealt in at 55 fl. The Paris tin market has remained without variations. At Hamburg the article has been purchased only in small lots, to meet the requirements of consumption. At Cologne, as well as at Berlin, the market is inactive. At Stettin the article has also been without demand. On the various German markets the article, although less in demand, has, nevertheless, been more firmly held. At Berlin the stock has a tendency to decline, some large parcels having been sought for, as well for the interior as for export. At Cologne prices have been without change. Soft refined lead is a little firmer at the quoted prices. The Stettin market has been quiet. At Rotterdam, Stolberg, and Eschweiler leads have maintained themselves by continuation at 10½ fl., and various German marks at 10½ fl. Hamburg bulletins present no interest as regards zinc. A Breslau letter states:—"Since our last advice, the state of our market has experienced no change; affairs remain quiet, but producers maintain quotations firmly." At Paris rough zinc has remained at 23½ fr. per ton, with little business.

A certain amelioration has been noticed in the position of the metallurgical market of Belgium, but the Liège works are more favoured than those of Charleroi. The Cockerill Company has ceded to the Couillet and Monceau Works a part of a contract for rails which it has recently secured. The works of MM. de Dordot, at Châteleineau, are now producing on an average 3000 tons of rails per month. About one-third of this production is delivered to England. The establishment is now manufacturing rails for a line which is being constructed in Wales, a result which certainly could not have been anticipated some years since. A manufacturer of bolts and nuts, established some years since by M. Gosiaux at Laeken, near Brussels, has just been acquired by M. Cambier, of Morlanwelz. Orders for coal are less favourably sustained at Mons; nevertheless, working operations have not been slackened or checked, although prices have fallen slightly. Cargoes for Belgium are stopped, in consequence of the closing of the Scheldt, which took place July 27. At Charleroi the stoppage of the navigation has given activity to deliveries, and a part of the accumulated stock has been exhausted. The period of the closing of the canals will be employed by colliery owners in works of repair. The situation is very good at Liège; stocks are small, and sales are sustained; there is only one black point—the insufficiency of workpeople, although wages have attained a high point.

The St. Dizier market has presented a good appearance; a passable number of orders have arrived, and prices have great firmness. Rolled irons have made 8½ 12s. to 8½ 16s. per ton (first-class merchants). Pig appears completely neglected. A small affair which was undertaken a few days since was not successfully carried through, in consequence of the refusal of the sellers to part with pure charcoal-made pig for less than 4½ 12s. per ton. A rise of 8s. per ton is announced in the coke-made iron of the Moselle. It is stated that a contract of 100 tons of pig for refining has been concluded on a basis which places the price of the article at 8½ 12s. per ton, taken at the furnace. The entries at Paris of iron for construction purposes were 115 tons below those of the corresponding month of 1864, while those of pig show an increase of 400 tons as compared with June, 1864. The *Patrie* states that at the International Exhibition now being held at Cologne, France, England, and Prussia competed with regard to specimens of steel, and that M. Mielon carried off the palm. "Our compatriot can deliver to commerce," says the *Patrie*, "cast-steel at the rate of 24½ fr. per ton; still Prussian steel, inferior in quality, would cost nearly 28 fr. per ton. English steel is still dearer. We think, on comparing the figures, that France cannot fail to export a considerable quantity of this material as long as the Treaty of Commerce comes into force." The undertaking known as the Compagnie des Forges et Chantiers de la Méditerranée, founded in 1856 by M. Béhé, has just constructed, on the account of Turkey, three armour-plated gun-boats, intended exclusively for the navigation of the Danube. Hitherto the Ottoman Government had given all its orders of this kind to England, and this is the first occasion on which it has addressed itself to French mechanical industry. The collieries of the Pas-de-Calais have had numerous orders of late, a state of affairs which has enabled them to run off the coal in stock. There is now a slackening in the demand, from the fact that manufacturers of sugar, being in doubt as to the crop of beet-root, appear in no haste to give out orders; nevertheless, prices are firm. At Valenciennes there is great activity in the workings, and a want of labour is complained of.

We group together one or two miscellaneous facts. The Belgian General Company for Lighting and Heating by Gas, which has works in operation at Prague, Tournai, Louvain, Charleroi, and Chemnitz, while others are in construction at Catania, Sienna, and Rimini, sold in Sept., Oct., Nov., and Dec., 1864, and Jan., Feb., March, April, May, and June, 1865, 133,305,218 English cubic feet of gas, while in the corresponding months of 1863-4 the total sales amounted to 123,562,309 English cubic feet, showing an increase of 9,742,909 English cubic feet. The receipts of the great Paris Company for Lighting and Heating by Gas amounted to June 30 this year to 547,989 fr. as compared with 505,205 fr. in the corresponding period of 1864, showing an increase of 42,784 fr. The Flenes and Hardingham Collieries Company is about to issue 2000 obligations of 20 fr. each, bearing an annual interest of 6 per cent., and repayable at the rate of 30 fr. each in 30 years.

It appears with reference to the operations of the Stolberg and Westphalia Company that the extraction of the James Grube Colliery amounted in 1860 to 883,162 cwt.; in 1861, to 820,853 cwt.; in 1862 to 688,830 cwt.; in 1863, to 965,476 cwt.; and last year, to 1,082,775 cwt. The cost price of the coal extracted was 7s. 1d. per ton in 1860, 7s. 11d. in 1861, 8s. 8d. in 1862, 7s. 2d. in 1863, and 5s. 8d. last year. The quantity of lead minerals extracted from the Diessenlinchen Mine amounted in 1860 to 1593 tons, while in 1861 it was 2006 tons; in 1862, 2776 tons; in 1863, 2873 tons; and in 1864, 2610 tons. The quantity of zinc minerals obtained from the same mine in 1860 was 3491 tons; in 1861, 4497 tons; in 1862, 2810 tons; in 1863, 3120 tons; and last year, 3173 tons. The production of the Stolberg Zinc Works in 1860 was 3262 tons; in 1861, 3521 tons; in 1862, 3814 tons; in 1863, 3748 tons; and in 1864, 3994 tons. The Dortmund Zinc Works produced in 1860 143 tons; in 1861, 1119 tons; in 1862, 1830 tons; in 1863, 2141 tons; and in 1864, 2367 tons. The total combined production of these works was thus—in 1860, 3405 tons; in 1861, 4640 tons; in 1862, 5644 tons; in 1863, 5909 tons; and in 1864, 6361 tons. The sales of zinc amounted in 1860 to 2788 tons; in 1861, to 4337 tons; in 1862, to 4665 tons; in 1863, to 6418 tons; and 1864, to 5792 tons. The total stock of rough zinc thus amounted in 1860 to 963 tons; in 1861, to 1329 tons; in 1862, to 2265 tons; in 1863, to 1879 tons; and in 1864, to 2265 tons. The stock of rolled zinc was in 1860, 247 tons; in 1861, 164 tons; in 1862, 199 tons; in 1863, 69 tons; and last year, 214 tons. The production of merchants' lead (Stolberg) was in 1860, 6340 tons; in 1861, 5181 tons; in 1862, 8269 tons; in 1863, 8966 tons; and in 1864, 9330 tons. The production of silver (Stolberg) was in 1860, 1,342 tons; in 1861, 1,876 tons; in 1862, 2,648 tons; in 1863, 1,936 tons; and in 1864, 2,308 tons. The sales of refined Stolberg lead amounted in 1860 to 6597 tons; in 1861, to 8184 tons; in 1862, to 8070 tons; in 1863, to 9448 tons; and in 1864, to 7667 tons. The sales of Stolberg argentiferous lead attained a total of 750 tons in 1864. The stock of refined Stolberg lead in 1860 was 1177 tons; in 1861, 1174 tons; in 1862, 1369 tons; in 1863, 886 tons; and in 1864, 2398 tons. The productions of Ransbeck merchants' lead in 1860 was 1923 tons; in 1861, 2273 tons; in 1862, 2112 tons; in 1863, 2229 tons; and last year, 2361 tons. The production of Ransbeck silver in 1860 was 1,377 tons; in 1861, 1,559 tons; in 1862, 1,321 tons; in 1863, 1,333 tons; and last year, 1,454 tons. The sale of refined Ransbeck lead in 1860 was 1657 tons; in 1861, 2192 tons; in 1862, 2251 tons; in 1863, 2352 tons; and last year, 1674 tons. The stock of refined Ransbeck lead was 480 tons in 1860; in 1861, 537 tons; in 1862, 416 tons; in 1863, 392 tons; and last year, 678 tons.

For further particulars, and to treat for the sale thereof, apply to
Victoria-place, Newport, Monmouthshire.
Newport, Monmouthshire, July 19, 1865.

THE MINING SHARE LIST

BRITISH DIVIDEND MINES.

Shares.	Mines.	Paid.	Last Pr.	Business.	Total divs.	Per Share.	Last Paid.
1300	Alderley Edge (cop.), Cheshire [L.]	10 0 0	—	—	11 3 0	0 15 0	Dec. 1924
4000	Bedford United (cop.), Tavistock [S.]	2 0 0	—	—	13 11 0	0 2 0	Oct. 1924
1248	Boswall (tin), copper, St. Just	8 15 0	—	—	1 5 0	0 0 0	May, 1924
200	Blackall (tin), copper, St. Just	91 5 0	—	—	480 15 0	0 3 0	May, 1924
10000	British State Company [L.]	7 0 0	—	—	8 per cent.	—	Mar. 1925
1600	British Hematite Iron [L.]	7 4 0	—	—	6 4 0	0 0 0	Nov. 1924
1000	Bromfield (lead), Cardigan [L.]	13 0 0	—	—	6 15 0	0 10 0	July, 1925
1200	Bryn Gwyn (lead), Mold [L.]	9 0 0	—	—	250 10 0	0 2 0	June, 1925
916	Cargill (silver-lead), N. Llyn	15 7 0	—	—	10 15 0	0 15 0	May, 1925
1400	Carn Brea (copper, tin), Illogan	15 0 0	—	—	250 10 0	0 2 0	June, 1925
2880	Clifford Amalgamated (cop.), Gwyn	30 0 0	28	—	35 5 0	0 10 0	June, 1925
2000	Copper Mines of England	28 0 0	—	—	7 1/2 per cent.	—	Half-yrly.
40000	Ditto (stock)	100 0 0	—	—	1 per cent.	—	—
867	Gwm Erkin (lead), Cardiganshire [L.]	7 10 0	—	—	16 15 0	0 1 0	June, 1925
125	Gwyneth (lead), Cardiganshire	60 0 0	—	—	288 10 0	0 5 0	July, 1925
280	Derwent Mines (all-lead), Durham	300 0 0	—	—	129 10 0	0 7 10	June, 1925
124	Devon Gt. Cons. (cop.), Tavistock [S.]	1 0 0	—	—	981 0 0	0 9 0	July, 1925
428	Dolcoath (copper, tin), Camborne	138 17 6	—	—	795 10 0	0 5 0	June, 1925
512	East Bassett (cop.), Redruth [S.]	29 10 0	—	—	10 5 0	0 5 0	Nov. 1924
8000	East Carn Brea (copper), Redruth	3 15 0	—	—	0 5 0	0 5 0	June, 1925
6148	East Caradon (copper), St. Cleer [S.]	2 14 6	12 1/2	—	13 12 0	0 10 0	July, 1925
300	East Darnley (lead), Cardiganshire	32 0 0	—	—	107 10 0	0 2 0	June, 1925
128	East Pool (tin), copper, Pool, Illogan	34 5 0	—	—	269 10 0	0 4 0	June, 1925
5000	East Rosewarne (cop., tin), Gwennap	3 15 0	—	—	0 7 0	0 2 0	May, 1925
2800	Foxdale (lead) Isle of Man [L.]	25 0 0	—	—	67 0 0	0 5 0	May, 1925
16000	Frank Mills (lead), Christow	3 18 6	—	—	2 7 6	0 7 0	May, 1925
5000	Great Laxey (lead), Isle of Man [L.]	4 0 0	—	—	2 11 0	0 10 0	June, 1925
6000	Great Wharfedale (lead), Helston [S.]	4 0 0	—	—	6 19 0	0 17 6	June, 1925
119	Great Work (tin), Gernoe	100 0 0	—	—	15 0 0	0 5 0	May, 1925
1024	Herodotus (id.), near Liskeard, Wales	8 10 0	—	—	33 5 0	0 15 0	Aug. 1925
400	Lisburne (lead), Cardiganshire [S.]	18 10 0	—	—	435 10 0	0 3 0	Aug. 1925
2000	Mace-y-Bain (lead) [L.]	20 0 0	—	—	1 0 0	0 1 0	Oct. 1924
3000	Marx Valley (copper), Caradon	4 10 6	—	—	3 2 6	0 2 0	July, 1925
3000	Minera Boundary (lead), Wrexham [L.]	1 0 0	—	—	0 8 0	0 2 0	June, 1925
1800	Minera Mining Co. [L.] (id.), Wrexham	26 0 0	—	—	175 3 0	0 5 0	May, 1925
30000	Mining Co. of Ireland (cop., lead, coal)	7 0 0	—	—	19 2 10	0 16 1	Jan. 1925
40000	Mwynydd (iron ore) [L.] [S.]	2 18 0	—	—	0 4 0	0 2 0	April, 1924
250	Nanty Mines (lead), Montgomery	30 0 0	—	—	7 0 0	0 1 0	June, 1924
500	New Birch Tor and Vistler Cons. (tin)	1 6 0	—	—	0 11 0	0 1 0	May, 1924
5936	North Trekerby (copper), St. Agnes	1 9 0	—	—	0 13 0	0 2 6	Feb. 1924
300	Parya Mines (copper), Anglesey [L.]	60 0 0	—	—	147 0 0	0 5 0	Aug. 1925
1193	Providence (tin), Uny Lelant [S.]	6 7 3	33	—	77 5 0	0 1 0	May, 1925
30	Silver Lake Mining Company	280 0 0	—	—	—	2 10 0	Dec. 1924
812	South Caradon (cop.), St. Cleer [S.]	1 5 0	—	—	490 10 0	0 7 0	July, 1925
6000	St. Day United (tin), Redruth	14 0 0	—	—	0 5 0	0 5 0	May, 1924
8000	St. Ives Consols (tin), St. Ives	8 0 0	—	—	490 10 0	0 10 0	May, 1924
5000	Tincroft (tin), copper, Illogan [S.]	9 0 0	—	—	17 1 0	0 10 0	June, 1925
6000	West Bassett (copper), Illogan [S.]	1 10 0	—	—	34 10 0	0 5 0	July, 1925
5000	W. Chiverton (id.), Penzance [S.]	80 0 0	—	—	53 10 0	0 1 0	Nov. 1924
256	West Damsel (copper), Gwennap	88 10 0	—	—	433 0 0	0 4 0	June, 1925
500	W. Wh. Seton (cop., Camborne [S.]	47 10 0	—	—	611 0 0	0 1 0	Aug. 1925
512	Wheal Bassett (copper), Illogan [S.]	5 2 6	80	—	296 10 0	0 1 0	May, 1925
1024	Wheal Friendship (copper), Devon	20 0 0	—	—	15 0 0	0 10 0	Aug. 1925
412	Wheal Jane (silver-lead), Kea	2 10 0	—	—	2 9 0	0 2 6	May, 1925
1024	Wheal Kitty (tin), St. Agnes	5 4 6	—	—	59 17 6	0 10 0	Mar. 1924
1024	Wheal Mary Ann (id.), Menheniot [S.]	8 0 0	—	—	288 5 0	0 4 0	Mar. 1924
1500	Wheal Mary Ann (tin), Lelant	2 6 0	—	—	349 3 0	0 5 0	June, 1924
80	Wheal Owles (tin), St. Just, Cornwall	70 0 0	—	—	201 15 0	0 5 0	June, 1925
396	Wheal Seton (tin), copper, Camborne	58 10 0	205	—	82 0 0	0 10 0	June, 1925
1040	Wh. Trevelyan (id.), Liskeard [S.]	8 17 0	—	—	15 3 0	0 6 0	May, 1925
7000	Wicklow (copper) [L.]	2 10 0	—	—	—	—	—

[* Dividends paid every two months. † Dividends paid every three months.]

BRITISH MINES WITH DIVIDENDS IN ABEYANCE.

240	Roseann (tin), St. Just	20 10 0	—	—	36 10 0	0 1 0	Mar. 1925
360	Conduvor (cop., tin), Camborne	76 10 0	90	85 90	85 0 0	0 2 0	June, 1925
2480	Cook's Kitchen (copper), Illogan	18 18 6	8 1/2	8 9	1 7 0	0 7 0	May, 1927
1024	Copper Hill (copper), Redruth	12 0 0	—	—	2 7 6	—	Sept. 1926
1056	Craddock Moor (copper), St. Cleer	8 14 0	—	—	7 12 0	0 4 0	June, 1925
4076	Devon and Cornwall (cop.), Tavistock	6 8 8	—	—	0 10 0	0 2 6	Feb. 1925
13800	Drake Wall (tin), copper, Calstock	1 9 0	—	—	0 16 0	0 1 6	Jan. 1925
6000	Drygwyn (lead), Wales	12 6 0	—	—	0 17 6	0 2 6	Jan. 1925
1908	East Whal Lovell (tin), Wendron	3 9 0	10	9 10 1/2	41 9 0	0 16 0	May, 1925
940	Fowey Consols (copper), Tywardreath	4 11 6	—	—	81 9 0	0 16 0	May, 1925
6000	Great South Tolgus (copper), Redruth	0 14 6	2	1 1/2	7 18 6	0 5 0	Dec. 1921
0240	Gunnislake (Clitters' Adit) (copper)	0 2 0	—	—	0 3 0	0 1 6	Mar. 1920
180	Levant (copper, tin), St. Just	2 10 0	—	—	1091 0 0	0 5 0	May, 1920
640	Mount Pleasant (lead), Mold	4 0 0	—	—	18 18 1	0 7 6	Aug. 1923
5000	Orsed (lead), Flintshire	0 0 0	—	—	0 10 0	0 8 0	Mar. 1923
1772	Pelberron (tin), St. Agnes	16 0 0	—	—	7 19 6	0 10 0	Nov. 1923
812	Pelberron (tin), St. Agnes	8 0 0	—	—	1 0 0	0 1 0	July, 1923
5000	Rosewall Hill and Ransome (tin)	3 0 0	—	—	74 10 0	0 1 6	June, 1923
612	South Tolgus (cop.), Redruth	8 0 0	—	—	370 13 6	0 1 0	Nov. 1923
980	S. Wh. Frances (cop.), Illogan [S.]	18 18 6	—	—	9 15 0	0 1 0	June, 1924
872	Trevelyan Consols (tin), St. Ives	15 0 0	—	—	7 0 0	0 10 0	Sept. 1924
1000	Trumpet Consols (tin), near Helston	11 10 0	—	—	11 0 0	0 2 0	Mar. 1924
4200	Vigra and Clogau (copper) [L.]	8 0 0	—	—	6 2 6	0 10 0	Mar. 1924
1024	West Caradon (cop.), Liskeard [S.]	10 0 0	—	—	101 1 0	0 10 0	Oct. 1923
1000	Wheal Bassett (tin), copper, Illogan	7 0 0	—	—	3 0 0	0 10 0	Oct. 1923
1024	Wheal Kitty (tin), Uny Lelant [S.]	7 0 0	—	—	10 2 6	0 7 6	July, 1924
896	Wheal Margaret (tin), Uny Lelant	13 17 6	—	—	6 1 5	0 5 0	Nov. 1924
3044	Wheal Trevelyan (tin), Gwennap	6 11 3	—	—	0 19 0	0 3 0	May, 1924
6400	West Fowey Consols (tin and copper)	7 10 0	—	—	—	—	—
8000	Wharfedale Mining Company [L.]	0 5 6	—	—	—	—	—

FOREIGN DIVIDEND MINES.

2484	Burra Burra (cop.), South Australia	5 0 0	—	—	320 0 0	0 5 0	Sept. 1924
15000	Capricorn Mining [L.] [S.]	7 0 0	11	10 1/2	2 2 6	0 17 6	June, 1925
12000	Cobra Copper Co. (cop.), Cuba [S.]	40 0 0	24	—	101 0 0	0 1 0	Jan. 1924
70000	English and Australian	5 0 0	—	—	1 12 0	0 2 0	Aug. 1924
16000	East Indian Coal, Calcutta [L.]	10 0 0	—	—	7 1/2 per cent.	—	Yearly.
25000	Fortuna (lead), Spain [L.] [S.]	2 0 0	—	—	0 14 4	0 8 0	Dec. 1924
28000	Gen. Mining Assoc., Nova Scotia [S.]	24 0 0	—	—	21 10 0	0 1 0	June, 1924
48000	Kapunda Mining Co., Australia [S.]	1 0 0	—	—	0 19 0	0 1 0	June, 1924
15000	Linares (lead), Spain [L.] [S.]	3 0 0	—	—	11 6 4	0 5 0	Jan. 1925
10000	Lunenburg (Portugal) [S.]	2 0 0	—	—	1 7 0	0 3 0	June, 1925
9275	New Wildberg (copper), Germany	3 0 0	—	—	0 10 0	0 10 0	Aug. 1924
50000	Panfilio (copper) [L.] [S.]	3 0 0	—	—	7 1/2 per cent.	—	Yearly.
10000	Pantelhaud (all-lead), France [S.]	120 0 0	—	—	2 3 0	0 16 0	Dec. 1924
97500	Port Phillip (gold), Clunes [S.]	1 0 0	—	—	0 13 6	0 1 0	July, 1925
11000	St. John del Rey [L.] [S.]	15 0 0	—	—	63 15 0	0 2 10	June, 1924
43174	United Mexican (all-lead), Mexico [S.]	28 5 0	4	—	3 19 0	0 5 0	Sept. 1924
10000	Vancouver (coal) [L.]	5 0 0	—	—	0 15 0	0 5 0	Nov. 1924
40000	Victoria (London) Mining Co. [L.]	1 0 0	—	—	5 per cent.	—	—
50000	West Canada Mining Company [L.]	1 0 0	—	—	0 19 6	0 2 6	May, 1925

FOREIGN MINES WITH DIVIDENDS IN ABEYANCE.

10000	Altan and Quamenang (tin), (cop.) [L.] [S.]	4 10 0	—	—	4 5 0	0 15 0	Nov. 1923
30000	Australian (cop.), S. Australia [L.] [S.]	7 6 0	—	—	0 1 0	0 1 0	Dec. 1923
6000	Central American (silver) [L.]	5 0 0	—	—	4 6 8	0 14 0	Dec. 1923
10000	Copala Mining Company, Chile [L.]	16 0 0	—	—	6 18 0	0 10 0	Nov. 1923
100000	Don Pedro No. Del Rey [L.] [S.]	0 12 6	—	—	0 9 0	0 9 0	Dec. 1923
103816	Mariguata and New Granada [S.]	1 0 0	—	—	0 9 6	0 1 6	July, 1923
45000	Yudanamutana (cop.), S. A. [L.] [S.]	3 0 0	—	—	0 5 0	0 5 0	Aug. 1923

NON-DIVIDEND FOREIGN MINES.

Shares.	Mines.	Paid.	Last Pr.	Bus. done.	Last Call.
35000	Alamillos (lead), Spain [L. £3] [S.E.]	1 10 0	..	1½	.. April, 1865
100000	Anglo-Brazilian (gold), Brazil [L. £1] [S.E.]	0 6 0	..	..	.. Dec. 1865
50000	Barric Tin Streaming Company [L. £1]	0 17 6	..	..	.. Oct. 1864
30000	Capula (silver), Mexico [L. £2] [S.E.]	1 5 0	..	¾	.. Feb. 1864
10000	Copala Smelting [L.], Chili	10 0 0	..	..	.. May, 1864
75000	Dun Mountain (copper), New Zealand [L.] [S.E.]	1 0 0	..	..	.. Fully paid.
80000	East del Rey (gold), Brazil [L. £3] [S.E.]	2 5 0	..	1½ 1½	.. April, 1865
15000	El Chico Silver Mining and Reduction Company [L. £5]	3 0 0	..	..	.. Fully paid.
8000	English and Canadian Mining Company [L.]	5 0 0	..	..	.. Fully paid.
40000	Fortuna (copper), West Australia [L.]	2 0 0	..	..	.. Fully paid.
40000	Frontino and Bolivia (gold), New Granada [L. £3] [S.E.]	1 0 0	2	2½ 2½	.. Mar. 1866
10000	Gonnesa (lead) [L.] (5000 £5 paid, 5000 £3 paid.)	2 0 0	..	..	.. May, 1865
80000	Great Northern (copper), South Australia [L. £2] [S.E.]	1 10 0	..	..	.. June, 1865
10000	Great Barrier Land, Mining, &c., New Zealand [L.]	5 0 0	..	..	.. Fully paid.
24000	Hindostan (copper), Bengal [L. £5]	3 0 0	..	..	.. Feb. 1863
4000	Hope Silver-Lead and Copper Mining Co. [L.], Jamaica	25 0 0	..	..	.. Fully paid.
130000	Lagunazo (sulphur, copper), Portugal [L.]	1 0 0	..	..	.. Fully paid.
100000	Montes Aurores (gold), Brazil [L.] [S.E.]	2 0 0	..	¾	.. Fully paid.
12000	Norberta Coal and Iron [L. £20] (6000 £5 pd., 6000 £3 pd., 7000 £5 pd.)	—	..	..	.. Fully paid.
80000	Nova Scotia (land and gold) [L. £2]	1 0 0	..	..	.. Nov. 1862
10000	Otea (copper) New Zealand [L. £2]	1 0 0	..	..	.. Mar. 1865
16000	Pachuca Silver Mining Company, Mexico [L.]	1 0 0	..	..	.. June, 1863
6000	Poor River Land and Mineral [Limited]	100 0 0	..	..	.. Stock.
28000	Quebrada (copper), Venezuela [L. £10]	7 10 0	..	..	.. Sept. 1864
10178	Rhenish Consolidated (lead) [S.] (5000 £5 paid, 4178 30s. paid.)	—	..	..	.. Mar. 1865
5000	Rosa Grande (gold), Brazil [L. £1] [S.E.]	0 5 0	..	..	.. April, 1864
10000	San Rocio (lead), Spain [L. £1] [S.E.]	5 0 0	..	..	.. Fully paid.
8000	Santa Barbara (gold), Brazil [L.]	0 17 6	..	..	.. July, 1864
30000	Scottish Australian Mining Company [L. £1]	0 17 6	..	..	.. Feb. 1864
15000	South Europe Mining Company, Spain [L. £3]	1 0 0	..	..	.. Fully paid.
12000	Teplitz Colliery Co., Bohemia [L. £5]	3 0 0	..	..	.. June, 1863
80000	Val Antigorla (gold) [L. £2]	0 10 0	1	¾ 1½	.. July, 1865
6000	Val Sassam (silver, copper, and lead) [L. £10]	4 0 0	..	..	.. Mar. 1865
5000	Valdemard Mining Company [L. £20]	15 0 0	..	..	.. Oct. 1864
45000	Valdenances (gold), Italy [L. £1] [S.E.]	0 10 0	3	2½ 3	.. Fully paid.
20000	Victor Emanuel (gold), Italy [L. £1] [S.E.]	1 0 0	..	..	.. Fully paid.
10000	Western Africa Malachite (copper) [L.]	110 0 0	..	..	.. Oct. 1862
12000	Whael Ellen (copper), South Australia [L.]	5 0 0	..	..	.. Fully paid.
8000	Worthing (copper), South Australia [L.] [S.E.]	1 0 0	1	¾ 1	.. Fully paid.
70000	Yorke Peninsula, South Australia [L.]	1 0 0	..	..	.. Fully paid.